

SAND REPORT

SAND2003-1149
Unlimited Release
Printed April 2003

The Navruz Project: Transboundary Monitoring for Radionuclides and Metals in Central Asian Rivers

Data Report

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Abstract

The Navruz Project is a cooperative, transboundary, river monitoring project involving rivers and institutions in Kazakhstan, Kyrgyzstan, Tajikistan, and Uzbekistan and facilitated by Sandia National Laboratories in the U.S. The Navruz Project focuses on waterborne radionuclides and metals because of their importance to public health and nuclear materials proliferation concerns in the region. The Project also collects data on basic water quality parameters. Data obtained in this project are shared among all participating countries and the public through a world-wide web site (<http://www.cmc.sandia.org/Central/centralasia.html>) and are available for use in further studies and in regional transboundary water resource management efforts. This report includes graphs showing selected data from the Fall 2000 and Spring 2001 sampling seasons. These data include all parameters grouped into six regions, including main rivers and some tributaries in the Amu Darya and Syr Darya river systems. This report also assembles all data (in tabular form) generated by the project from Fall 2000 through Fall 2001. This report comes as the second part of a planned three-part reporting process. The first report is the Sampling and Analysis Plan and Operational Manual, SAND 2002-0484. This is the second report; the third report will include a thorough analysis and interpretation of selected data contained in this report.

Acknowledgments

The authors extend deepest thanks to the long list of scientists and technicians in Central Asia and the United States who have contributed to the Navruz Project.

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1. Introduction

1.1 Overview

Effective and sustainable management of rivers and watersheds transcending international boundaries must meet the difficult challenge of overcoming numerous transboundary methodological, cultural, linguistic, and political boundaries as well (UN/ECE 1992, Salman and de Chazournes 1998, Correia and da Silva 1999, Elhance 1999, Lueck 1999, Wolf 1999, Chenoweth and Feitelson 2001). The next generation of effective transboundary river and watershed monitoring and management projects must aim to overcome transboundary cultural and communication barriers, transboundary variation in objectives and methods, and they must build the trust and confidence essential for transboundary resource management. These projects must contain: a.) a social framework for cooperation, transparency and data sharing; b.) standardized objectives, sampling, analysis, and data management methods, and c.) communications technology that allows free and easy information and data exchange (Tidwell *et al.* 2000). Various transboundary projects exist in which some combinations of these components are included (Chenoweth 1999, Lueck 1999, Dieperink 2000, Chenoweth and Feitelson 2001, Passell, *et al.* 2002).

The study of radionuclide and metals concentrations in the rivers of Central Asia is of particular interest in the region because of the history of nuclear materials mining, fabrication, transport, storage, and nuclear weapons testing, during the regime of the Soviet Union. This industry left a legacy of radionuclide and metals contamination in some Central Asian regions, which poses a health hazard to populations who rely heavily upon surface water for agricultural irrigation and direct domestic consumption. Further, changes in riverborne radionuclide concentrations over time can provide a signal revealing the status of proliferation activities within the watershed. Therefore, monitoring for radionuclides and metals in rivers can be an effective tool both for helping safeguard public health, and for creating transparency, building confidence, and supporting nonproliferation treaties (OTA 1995, Wogman, *et al.* 2001).

The data in this report are the product of a cooperative, transboundary river monitoring project in Central Asia, including the republics of Kyrgyzstan, Kazakhstan, Uzbekistan and Tajikistan, and facilitated by Sandia National Laboratories in the United States. The technical objectives of the project are to use standard methods across all four countries for sample collection, analysis, and data management, so that data are easily comparable across national boundaries, and so they can be easily applied to transboundary resource management and planning. Basic water quality parameters are measured in this project in addition to metals and radionuclide concentrations, and data on all are reported here.

This report comes as the second part of a planned three-part reporting process. The first report is the Sampling and Analysis Plan and Operational Manual, SAND 2002-0484. This is the second report; the third report will include a thorough analysis and interpretation of selected data contained in this report.

Sampling at 15 locations in each of the four countries occurred in Fall 2000, Spring 2001, and Fall 2001. This report includes data generated by project partners at the Institute of Nuclear Physics (INP) in Uzbekistan and the Institute of Nuclear Physics in Kazakhstan, using samples from all four countries and from all three sampling seasons. (Note: refer to Passell, *et al.*, 2002 for information on the sample analysis responsibilities of these institutes.) These data are shown in tabular form in Appendix B. This report also includes a graphical display of data generated at the INP-Uzbekistan using samples from all four countries, but only from either the Fall 2000 or Spring 2001 sampling seasons. These graphs, shown in Appendix A, represent a screening effort made to identify points and patterns of interest in the data, in preparation for more exhaustive analysis. This report also includes information on rivers and sampling locations used in the project. More information on data collection, sampling, analysis and data management can be found in Passell *et al.* (2002). Photos of sampling locations, other reports, and other information can be found at the internet website <http://www.cmc.sandia.gov/Central/centralasia.html>. Data in this report should be considered provisional and subject to correction. Consult the Principle Investigators before using these data in other research.

Ultimately, the purpose of this project is to help develop cooperation and collaboration on both transboundary water resources management and on nonproliferation, thereby reducing the threat of future conflict in the region over either of those issues. The data are intended for current and future studies, and to contribute to water resource management efforts both within and between countries. The project aims to help develop confidence and trust among Central Asian nations on both transboundary water resource management and nuclear materials transparency, and to help create an infrastructure for future cooperation. Finally, the project will demonstrate a science-based approach for establishing nuclear transparency in Central Asia and other regions in compliance with the Non-Proliferation Treaty.

1.2 Data description

Data were collected in the Navruz Project in Fall 2000, Spring 2001 and Fall 2001, from five different sampling media using methods described in Passell *et al.* (2002). The five different media are: water (dissolved); water (suspended); bottom sediments; aquatic vegetation; and soils. This report includes data from all those media on basic water quality parameters, radionuclides, and metals. Data from all sampling seasons are shown in Appendix B in tabular form. Data from either the Fall 2000 or Spring 2001 seasons are shown graphically in Appendix A. All data in Appendix A were generated by the INP-Uzbekistan, using samples from all four countries.

Tables 1-3 below show all the parameters measured in the Navruz project, and their units.

Table 1: Basic Water Quality Parameters

Time	Discharge (m ³ /s)	Water Temp. (deg C)	Dis-solved Oxygen (% saturation)	Dis-solved Oxygen (mg/L)	Specific Conductivity (uS/cm)	Salinity (g/L)	TDS (g/L)	Depth (m)	pH	Redox Potential (mV)
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Table 2: Radionuclide Parameters

Alpha activity	Beta activity
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Be-7	Na-22	Na-24	K-40	Cr-51	Mn-52	Mn-54	Co-56	Co-57	Ni-57
Co-58	Fe-59	Co-60	Zn-65	Sr-85	Y-88	Zr-95	Mo-99	Ru-103	Ru-106
Ag-108m	Ag-110m	Sn-113	Cd-115	Sb-122	Sb-124	Sb-125	I-131	Ba-133	Cs-134
Cs-137	Ce-139	Ce-141	Ce-144	Nd-147	Eu-152	Gd-153	Eu-154	Eu-155	Ta-182
Ta-183	Ir-192	Tl-201	Hg-203	Tl-207	Tl-208	Pb-210	Pb-211	Bi-212	Pb-212
Bi-214	Pb-214	Rn-219	Ra-223	Ra-224	Ra-226	Th-227	Ac-228	Ra-228	Th-228
Th-229	Pa-231	Th-231	Th-232	Pa-233	U-235	Np-237	U-238	Pu-239	Am-241
Cm-243									

Alpha and beta activity reported in Becquerel/kilogram (Bq/kg).

Water (dissolved) and water (suspended) reported in Becquerel/liter (Bq/L).

Sediments, vegetation, and soils reported in Bq/kg.

Table 3: Metals Parameters

Al	Ag	As	B	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	Hg
K	Mg	Mn	Mo	Na	Ni	Pb	Se	Si	Tl	V	Zn	

Water (dissolved) and water (suspended) reported in micrograms/liter ($\mu\text{g}/\text{L}$).

Sediments, vegetation, and soils reported in $\mu\text{g}/\text{g}$.

1.3 Characteristics of Selected Parameters

Table 4: Characteristics of Basic Water Quality Parameters

Discharge	Discharge, or stream flow, is the volume of water that moves past a designated point during a fixed period. Discharge data are critical for understanding the general hydrology in the system, for understanding changes in concentrations of chemical constituents over time, and for calculating total loads of constituents in a volume of water. Discharge is recorded in cubic meters per second.
Dissolved Oxygen (DO)	DO is a measure of the amount of oxygen present in water and is reported in both mg/L and as a percent of the total oxygen saturation value. DO is an important factor for many biological and chemical reactions in surface water.
Oxidation-Reduction Potential (Redox)	The oxidation-reduction potential (redox) is an indication of how oxidizing or reducing a solution is and measures the tendency of electrons to “flow” either toward or away from a noble metal electrode. Redox is an important factor in chemical reactions involving metals in water. Redox potential is an especially important measurement in poorly oxygenated ground water or surface water, but is less important in well-oxygenated surface waters.
pH	The pH parameter describes the balance between H ⁺ and OH ⁻ ions in water. It is calculated as: pH = -log [H ⁺], where [H ⁺] represents the molar concentration of hydrogen ions. Values for pH are reported on a scale that ranges from 0 to 14. A pH measurement of < 7 is acidic; a pH measurement of 7 is defined as a neutral solution; a pH measurement > 7 is an alkaline (or basic) solution. The pH of water directly affects solubilities of metals and the physiological functions of plants and animals.
Salinity	Salinity is a measure of salts in water, and is commonly calculated directly from specific conductivity. Salinity is reported in g/L. Irrigation water with high values for salinity is known to saline croplands and reduce crop productivity.
Specific Conductivity	Specific conductivity is a measure of the capacity of water to conduct an electrical current through the water's dissolved ionic content. Conductivity is reported in microSiemens (1×10^{-6} Siemens) or milliSiemens (1×10^{-3} Siemens) per centimeter at 25 degrees Celsius (uS/cm at 25°C).
Temperature	Temperature is an important factor in chemical and biological reactions in water. Accurate data values for DO, conductivity, and pH all rely on accurate temperature measurements.
Total Dissolved Solids (TDS)	TDS refers to the amount of solid materials, including ions, colloids, and organic material dissolved in water. TDS can be calculated directly from specific conductivity and is reported in mg/L.

Table 5: Characteristics of Selected Radionuclides

^{238}U	Uranium is a very heavy metal that can be used as a source of energy. It is the heaviest of all the naturally occurring elements with a density of 18.7 g/cm^3 . Human intake of uranium is due primarily to food ingestion. Two naturally occurring uranium isotopes are found in the earth's crust: ^{238}U and ^{235}U . More than 99% of the uranium that occurs in nature is ^{238}U , whose decay chain consists of 19 isotopes. The half-life of ^{238}U is 4.51×10^9 years.
^{232}Th	Thorium-232 occurs naturally. It has a half-life of 141 billion years and decays by alpha and gamma emission. Thorium-232 is at the top of the thorium series, which includes 12 isotopes and ends with the stable isotope ^{208}Pb . Thorium-232 concentration levels in soil are typically around 1 pCi/g, however the levels may range anywhere from 0.10 to 3.4 pCi/g.
^{226}Ra	^{226}Ra , a member of ^{238}U decay chain, is an alkali-earth element, and its salts dissolve easily in water. Radium migrates from uranium ores and may form such minerals as radio-calcite, radio-borate, and radio-fluorite. Its half-life is 1,602 years.
^{40}K	Potassium is the seventh most abundant metal and makes up about 2.4% of the Earth's crust. It is found in most soils and is essential for plant growth, which is why it is a key ingredient in fertilizers. ^{40}K , a radioactive isotope, occurs naturally but presents no appreciable hazard. The average human contains approximately 120,000 pCi of ^{40}K . The half-life of ^{40}K is 1.27 billion years. ^{40}K decays by beta and gamma emission, which accounts for the positive correlation between high ^{40}K activity levels and high beta activity levels in most every soil sample.
^{90}Sr	^{90}Sr has a half-life of 28.1 years. It is produced during the fission process in reactors and nuclear weapons tests. It is a pure beta-emitter with an average radiation energy of 195.8 keV. This radionuclide accumulates in human bones and historically is the most popular object of studies relating to nuclear weapons tests.
^{228}Th	^{228}Th is a member of the ^{232}Th series and is usually found in the soil in radioactive equilibrium with ^{232}Th . ^{228}Th has a half-life of 1.9 years, and decays with emission of alpha and gamma radiation.
^{210}Pb	^{210}Pb is a member of the ^{238}U series, has a half-life of 22.3 years, and decays with emission of beta and gamma radiation. In the soil, ^{210}Pb may not be in radioactive equilibrium with long-lived precursors: isotopes of uranium (238, 234) and ^{226}Ra . It may accumulate in vegetation and animals.
^{137}Cs	^{137}Cs is an artificial radionuclide and has a half-life of 30 years. It is formed as a result of fission in nuclear explosions and nuclear power plants).

²³⁹Pu	²³⁹ Pu, a nuclear fuel, has a half-life of 24,000 years and decays with emission of alpha radiation. The source of plutonium in the environment is nuclear tests and accidents, such as Chernobyl. It is a well-known toxin.
²⁴¹Am	²⁴¹ Am is a radioactive isotope that decays by emitting alpha particles to ²³⁷ Np. It also emits an easily detected gamma ray with energy of 60 keV. It has a half-life of 432 years and is a daughter of Pu-241, which is produced in reactors and during nuclear explosions. Am-241 is therefore a good indicator for the presence of Pu. In the environment, it tends to exist as an oxide that is relatively insoluble, and generally tightly bound to soil particles. If absorbed in the body, like most transuranic elements, it is a bone-seeker and accumulates on bone surfaces.

Table 6: Characteristics of Selected Metals

Antimony	While antimony is, in elemental form, a brittle, crystalline substance, its primary industrial use is as a hardener of lead plates in storage batteries. Exposure to high levels of antimony has been linked to various health problems, and animal studies have shown such acute effects as eye irritation, hair loss, lung damage, heart problems, and fertility problems. In low doses, antimony is used as a medication for parasite infections.
Barium	Barium is a silvery white metal. Its compounds have numerous industrial uses, and barium sulfate is used in medical diagnostics. Water-soluble barium compounds in high doses cause breathing difficulties, increased blood pressure, heart rhythm changes, stomach irritation, brain swelling, muscle weakness, and damage to the liver and other internal organs.
Cadmium	Cadmium metal does not corrode easily and has industrial applications in plating, metal coatings, and plastics. It is also used extensively in batteries. Ingesting high levels of cadmium is associated with severe toxic effects including lung damage, vomiting, and diarrhea, and can be fatal. Long-term exposure to low levels can lead to build-up in the tissues and can cause kidney damage. The U.S. Department of Health and Human Services has determined that cadmium and its compounds are probable carcinogens.
Copper	A common and economically important metal, copper is also an essential element for all plants and animals. High levels can be toxic, and long-term exposure to airborne copper can cause irritation, dizziness, headaches, and diarrhea. Drinking water with high levels of copper can cause digestive distress, and contact with the skin causes allergic reactions in some people.
Lead	Lead and lead compounds are found throughout the environment, due to burning fossil fuels as well as mining and manufacturing activities. Lead toxicity has been a subject of concern for many years, leading to its removal from motor fuels, paints, etc. Lead ingestion is particularly damaging to children because of its severe and permanent effects on the central nervous system. Lead acetate and lead phosphate have been identified as possible carcinogens through animal studies.

Manganese	Manganese does not occur naturally in elemental form, but its compounds are commonly used in steel making, pesticides, and as a gasoline additive. It is an essential trace element for good health, but exposure to high levels can cause nervous system damage. It may also cause respiratory problems and sexual dysfunction.
Mercury	Mercury is a liquid metal that, when heated, forms a colorless, odorless gas. Inorganic salts of mercury along with elemental mercury, have many industrial uses. Organic compounds are also common; methyl mercury is produced by microorganisms in water and soil. Exposure to high levels of metallic, inorganic, or organic mercury can permanently damage the brain, kidneys, and developing fetus. The U.S. EPA has determined that methyl mercury and mercuric chloride are possible human carcinogens.
Nickel	Nickel is abundant in the Earth's crust and is economically important. It has uses in metal alloys and catalysts. Nickel is an essential trace element for animals, and probably for humans as well. The most common health effect of nickel exposure in humans is allergic reaction. Breathing dust of nickel and nickel compounds has been linked with cancers of the respiratory tract.
Selenium	Selenium is found most often as a sulfide ore in conjunction with silver, copper, lead, or zinc. It is an essential trace element for humans. It is sufficiently common in the United States food supply such that most diets contain enough selenium to meet the daily requirement. In China and other places where selenium is lacking in the soil, the deficiency is associated with heart problems and muscle pain. Selenium poisoning has caused reproductive failure and death in aquatic organisms and waterfowl. High-level exposure in humans to selenium has toxic effects including loss of feeling and muscle control in the arms and legs. Animal studies indicate that selenium is a probable carcinogen in large, prolonged doses.
Silver	Silver is economically important for electronics and photography as well as jewelry and silverware. It is also used as a disinfectant and antibacterial agent. Exposure to large amounts of silver can cause discoloration of the skin, but the effect appears to be mainly cosmetic. Allergic reactions are also possible.
Zinc	Zinc is one of the most common elements in the Earth's crust and has uses in corrosion-resistant coatings, batteries, and alloys (brass and bronze). Its compounds are widely used in industry. Zinc is an essential dietary element, but like other trace elements, too much can be harmful. Effects of overdose include acute digestive problems, and, after long exposure, anemia, pancreas damage, and lowered levels of high-density lipoprotein.

1.4 Data Sampling Locations

Sampling locations for this study were chosen to characterize the Syr Darya and Amu Darya rivers from their sources to their outfalls in the Aral Sea. Samples were taken from locations along the main rivers and important tributaries. Dots in the map (Figure 1) indicate sampling locations; on the web site, those dots link to sample location information. More information on sampling locations is given in Sections 1.5 through 1.9, below. Other information about the sampling region can be found at the Navruz web site at <http://www.cmc.sandia.gov/Central/alt-text-map.html>, and in Passell *et al.* (2002).



Figure 1. Navruz Project Study Area

1.5 Kazakhstan Sampling Locations

The Institute of Nuclear Physics of Kazakhstan uses the following 15 sites in the Syr Darya watershed in Kazakhstan for radiation monitoring. This material is provided by the Kazakh partners; Kazakh spelling of place names is preserved.

Table 7: Kazakhstan Sampling Locations

Site	Location
KZ-01	Chardara Reservoir: Southeastern part of the coast between the Keles and Kurukkelles Rivers.
KZ-02	Chardara Reservoir: Northeastern part of the coast near Chardara town. Sites 1 and 2 measure the impact of economic and technogenic human activity on the environment (Site 2) and provide a comparison with the impact of natural factors (Site 1). Site 2 also provides initial information for comparison with all other sites.
KZ-03	Keles tributary, Saryagash town (upstream).
KZ-04	Keles tributary, Saryagash town (downstream), Abaj village. Sites 3 and 4 measure the environmental conditions in this resort zone (mineral water springs).
KZ-05	Badam tributary, Chymkent town (upstream), Sajram village.
KZ-06	Arys tributary, Chymkent town (downstream), near Obruchevka. Sites 5 and 6 measure the influence of the industrial center at Chymkent.
KZ-07	Chernak village, below Turkestan town. Site 7 measures the influence of agriculture activity and the status of the Turkestan canal.
KZ-08	Chyily (upstream), Tomlnaryk village.
KZ-09	Chyily.
KZ-10	Chyily (downstream), Zhulek village. Sites 8, 9, and 10 cover several uranium deposits.
KZ-11	Kyzyl-Orda, upstream, Belkul' village.
KZ-12	Kyzyl-Orda, downstream, Abaj village. Sites 11 and 12 measure the impact of industrial activities in Kyzyl-Orda town.
KZ-13	Korkyt village, below Zhusa town. Site 13 measures the joint influence of the towns Terenozek, Dzhagalat, and Dzhusaly on the Karaozek tributary.
KZ-14	Bajkonur town below Toretam village, near Bay-Kozha. Site 14 measures the influence of activities at the Bajkonur space center.
KZ-15	Kazalinsk town. Site 15 provides a control on the total influence of all areas/sites and all activities related to the Syr Darya (in comparison with Site 2).

1.6 Kyrgyzstan Sampling Locations

The Institute of Physics of the National Academy of Sciences of Kyrgyzstan uses the following 15 sites in the watershed of the Syr Darya. This material is provided by the Kyrgyz partners; Kyrgyz spelling of place names is preserved.

Table 8: Kyrgyzstan Sampling Locations

Site	Location
KG-01	The tributary Kichi-Naryn before the confluence with the Chong-Naryn River.
KG-02	The tributary Chong-Naryn before the confluence with the Kichi-Naryn River.
KG-03	Naryn River after the confluence of the Chong-Naryn and Kichi-Naryn tributaries.
KG-04	Tributary At-Bashy before its confluence into the Naryn River.
KG-05	Naryn River after the confluence of the At-Bashy tributary. The investigation in the area of Toktogul reservoir is related to the study of agricultural and technogenic affects in the area.
KG-06	Chychkan River before the confluence into the Toktogul reservoir.
KG-07	Naryn River before its confluence in the Toktogul reservoir (hydrological post Uch-Terek).
KG-08	Toktogul Reservoir.
KG-09	Naryn River after the Toktogul Reservoir (region of Kara-Kul town).
KG-10	Naryn River, southeast part of the town of Tashkumyr.
KG-11	Mailuu-Su River, on the bridge (boundary with Uzbekistan).
KG-12	Mailuu-Su River at the departure from Mailuu-Su town.
KG-13	Mailuu-Su River near the transformer factory.
KG-14	Right tributary of the Mailuu-Su River.
KG-15	Mailuu-Su River 200 meters from the tributary.

1.7 Tajikistan Sampling Locations

The following sites have been identified for sample collection in Tajikistan. This material is provided by the Tajik partners; Tajik spelling of place names is preserved.

Table 9: Tajikistan Sampling Locations

Site	Location
TJ-01	The Varzob River, 18 kilometers above Dushanbe city.
TJ-02	The Varzob River, 9 kilometers below Dushanbe city.
TJ-03	The Kafirnigan River, 1 kilometer above the confluence with the Varzob River.
TJ-04	The Kafirnigan River, 3 kilometers below its confluence with the Elok River.
TJ-05	The Kafirnigan River at the Shaartuz railway bridge.
TJ-06	The Elok River, 1 kilometer above its flow into the Kafirnigan River.
TJ-07	The Vakhsh River at the Dzhilikul bridge.
TJ-08	“Chiluchor chashma,” the spring.
TJ-09	The Vakhsh River, 1 kilometer below Norak City.
TJ-10	The Yekhsu River at hydrological post “Vose”, at the settlement Vose.
TJ-11	The Kyzylsu River, 5 kilometers from the settlement Vose, before its confluence with the Yekhsu River.
TJ-12	The Kyzylsu River, Gulistan Village.
TJ-13	The Syr Darya, 60 kilometers above the Kayrakkum reservoir, (unfinished frontier bridge), at settlement Bulok.
TJ-14	The Syr Darya, the bridge on the entrance of Khudzhand city.
TJ-15	The Isfara River, the settlement Yangiobod between Rabot city and Nefteobod city.

1.8 Uzbekistan Sampling Locations

The Institute of Nuclear Physics in Uzbekistan uses five major watersheds for sample collection. Each watershed is presented below with its corresponding sites. This material is provided by the Uzbek partners; Uzbek spelling of place names is preserved.

Table 10: Uzbekistan Sampling Locations

Amu Darya (Tuyamuyun, Kyzylzhar and Kipchak – in Lower Amu Darya)	
Site	Location
UZ-01	Kyzylzhar village, Karakalpakstan, 1 km above the terminating range of the Amu Darya (the nearest town is Kungrad).
UZ-02	Kipchak town, Karakalpakstan, 0.5 km above the town.
UZ-03	Tuyamuyun site, 8 km below the dam (Khorezm region).
Syr Darya (Chinaz, Bekabad and Karadarya)	
This river resource provides water for irrigation, industrial purposes, and drinking water. The sewage effluent from the many industrial activities in this watershed has an impact on water resources. Among these enterprises are Chirchik-”Elektrokhimprom,” the Altyaryk oil processing factory, fiber crops plants, sewage disposal, and the factories of Angren, Almalyk, Gazalkent, Chirchik, Tashkent, and Chinaz. Sampling sites at Syr Darya are located at existing meteorological stations.	
Site	Location
UZ-04	Karadarya River, Namangan region, 20 km southwest from Namangan, at Kol' village. The meteorological post is below the merging point of the Karadarya and Naryn Rivers with the Syr Darya.
UZ-05	Bekabad, Tashkent region, 0.9 km below the dump of drainage waters of “Vodokanal” enterprise.
UZ-06	Chinaz town, Tashkent region, 3.5 km SSW from Chinaz.

Akhangaran River (Tuyabuguz, Angren, Yangiabad)	
Site	Location
Intro	The basin of the Akhangaran River is a tributary of the Syr Darya. Sampling sites at the Akhangaran River are located at existing meteorological stations.
UZ-07	Yangiabad town, Tashkent region, 5.5 km below Dukant village.
UZ-08	Angren town, Tashkent region, 5.5 km below the Angren dam.
UZ-09	Tuyabuguz, Tashkent region, Soldatskoe village, 0.5 km above the outfall of the Akhangaran River.
Chirchik River (Gazalkent, Kibraj, Zangiota)	
Site	Location
Intro	The Chirchik River basin, one of Syr Darya's tributaries, receives effluent from industrial and private sewage and drainage waters. Sampling sites at the Chirchik River are located at existing meteorological stations.
UZ-10	Gazalkent town, Tashkent region, 3.5 km below the town.
UZ-11	Kibraj village, Tashkent region, 3 km below the UZKTZhM enterprise sewage effluent.
UZ-12	Tashkent City, Tashkent region, 3 km below the sewage effluent from the Segeli KSM plant.
Zaravshan River (Ravatkhodzha, Kattakurgan, Navoi)	
Site	Location
Intro	The Zarafshan River is related to the Amu Darya basin. Sampling sites at the Zarafshan River will be located at existing meteorological stations. (Note: Sampling from Zarafshan River sites will not be done in the present stage of the Navruz experiment. In the future, if the monitoring experiment is extended, these sites will be included in the sampling.)
UZ-13	Ravatkhodzha, Samarkand region, 3.7 km below the outfall of the Taligulyan dump.
UZ-14	Kattakurgan, Samarkand region, 0.8 km below the outfall of the Chegonak collector.
UZ-15	Navoi City, Navoi region, 0.8 km below the sewage effluent from "NavoiAzot" enterprise.

1.9 U.S. Sampling Locations

Sampling by SNL occurred at two sites along the Rio Grande near Albuquerque in Central New Mexico.

Table 11: U.S. Sampling Locations

Rio Grande near Albuquerque	
Site	Location
US-01	Bernalillo, approx. 25 km upstream of Albuquerque
US-02	Los Lunas, approx. 40 km downstream of Albuquerque

Appendix A. Data Graphs

This Appendix consists of graphs showing the spatial distribution of measured parameters and constituents. The data sampling locations are as described in Sections 1.5 through 1.9. The data points in each graph are arranged roughly in upstream-to-downstream order. All of the data are from the analysis conducted by the Institute of Nuclear Physics, Uzbekistan.

Data are presented in the data graphs in groups that generally represent the flow of the respective river systems from upstream to downstream. The sampling locations depicted in the Navruz Project data graphs are represented in these groups, which are as follows:

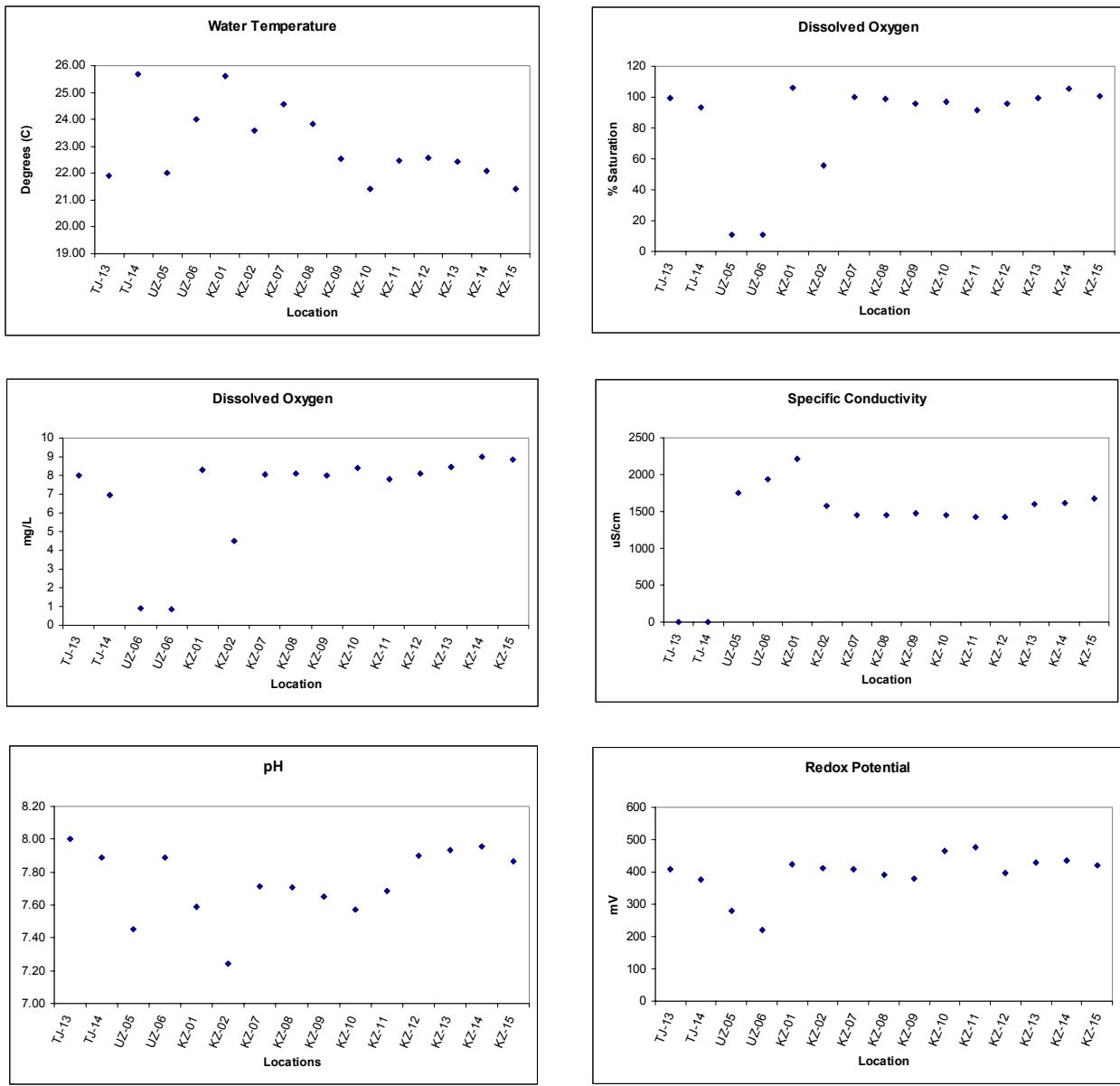
Syr Darya	Fifteen sampling points on the Syr Darya from above the Kayrakkum reservoir in Tajikistan to near the Aral Sea in Kazakhstan. (Sampling locations: TJ-13, TJ-14, UZ-05, UZ-06, KZ-01, KZ-02, KZ-07, KZ-08, KZ-09, KZ-10, KZ-11, KZ-12, KZ-13, KZ-14, KZ-15)
Mailuu Su	Five sampling points on the Mailuu Su River, tributary of the Syr Darya, in Kyrgyzstan. (Sampling locations: KG-15, KG-14, KG-13, KG-12, KG-11)
Dushanbe	Five sampling points on the Varzob, Kafirnigan, and Elok rivers near Dushanbe, Tajikistan. (Sampling locations: TJ-01, TJ-06, TJ-02, TJ-04, TJ-03)
Southern Tajikistan	Three sampling points on three tributaries of the Amu Darya in Tajikistan. (Sampling locations: TJ-07, TJ-05, TJ-08)
Zaravshan/Amu Darya	Six sampling points on the Zaravshan River, tributary of the Amu Darya, and the Amu Darya near the Aral Sea in Uzbekistan. (Sampling locations: UZ-13, UZ-14, UZ-15, UZ-03, UZ-02, UZ-01)
Kyzylzu	Three sampling points on the Kyzylzu River, tributary of the Amu Darya, and its tributary, the Yekhsu, in Tajikistan. (Sampling locations: TJ-10, TJ-11, TJ-12)

More information on sampling locations is given in Section 1.4. Other information about the sampling region can be found at the Navruz web site at <http://www.cmc.sandia.gov/Central/alt-text-map.html>, and in Passell *et al.* (2002).

The data in these charts should be considered provisional and subject to correction. Consult with the Principal Investigator before using these data for publication or further research.

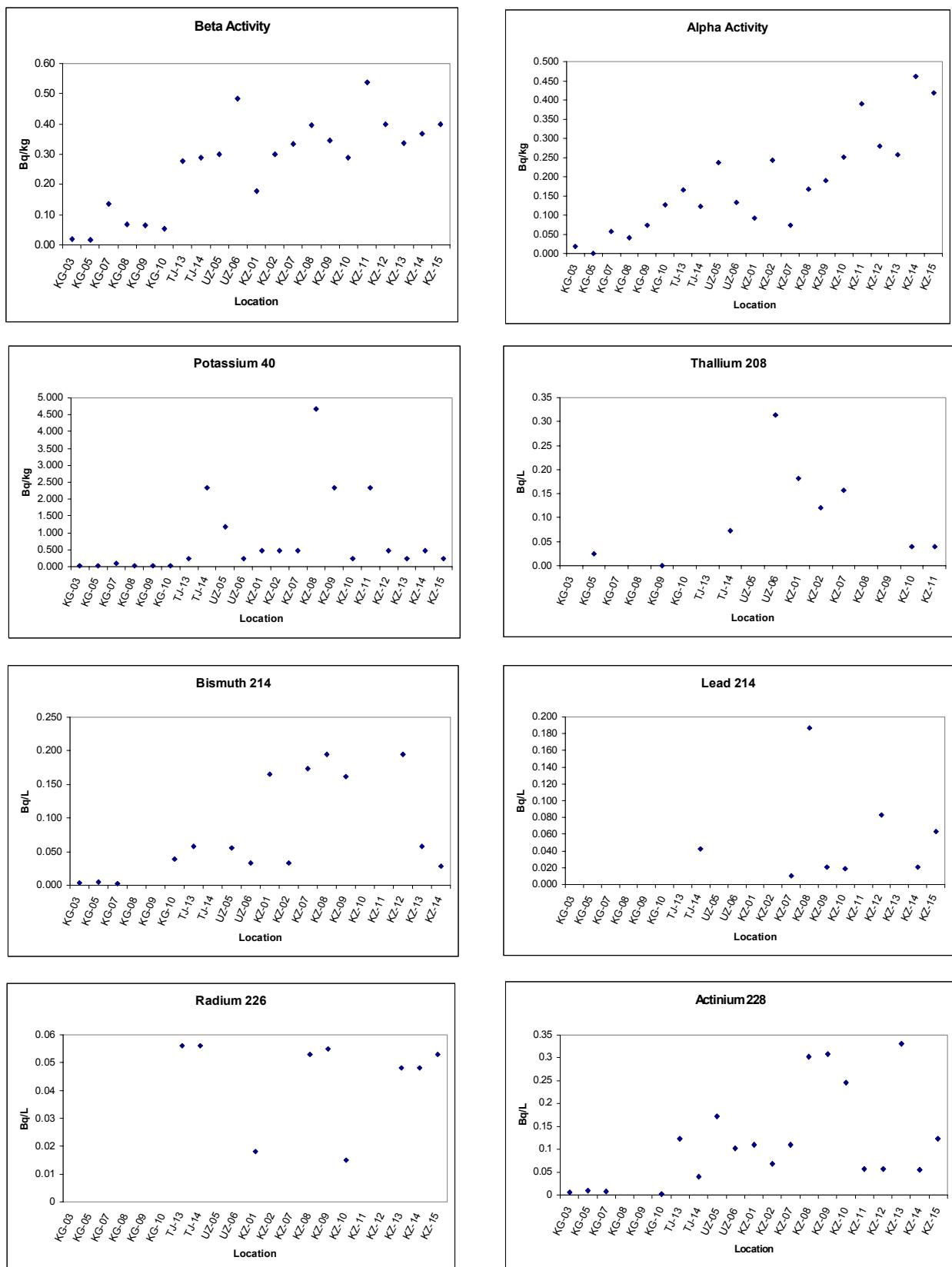
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Syr Darya Basic Water Quality, Fall 2000

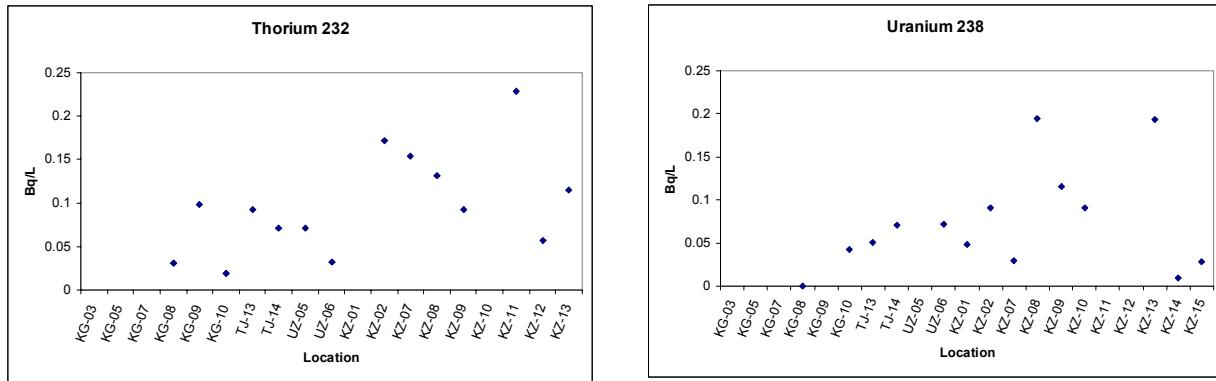


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Syr Darya Water (Dissolved) Radionuclides Data, Fall 2000

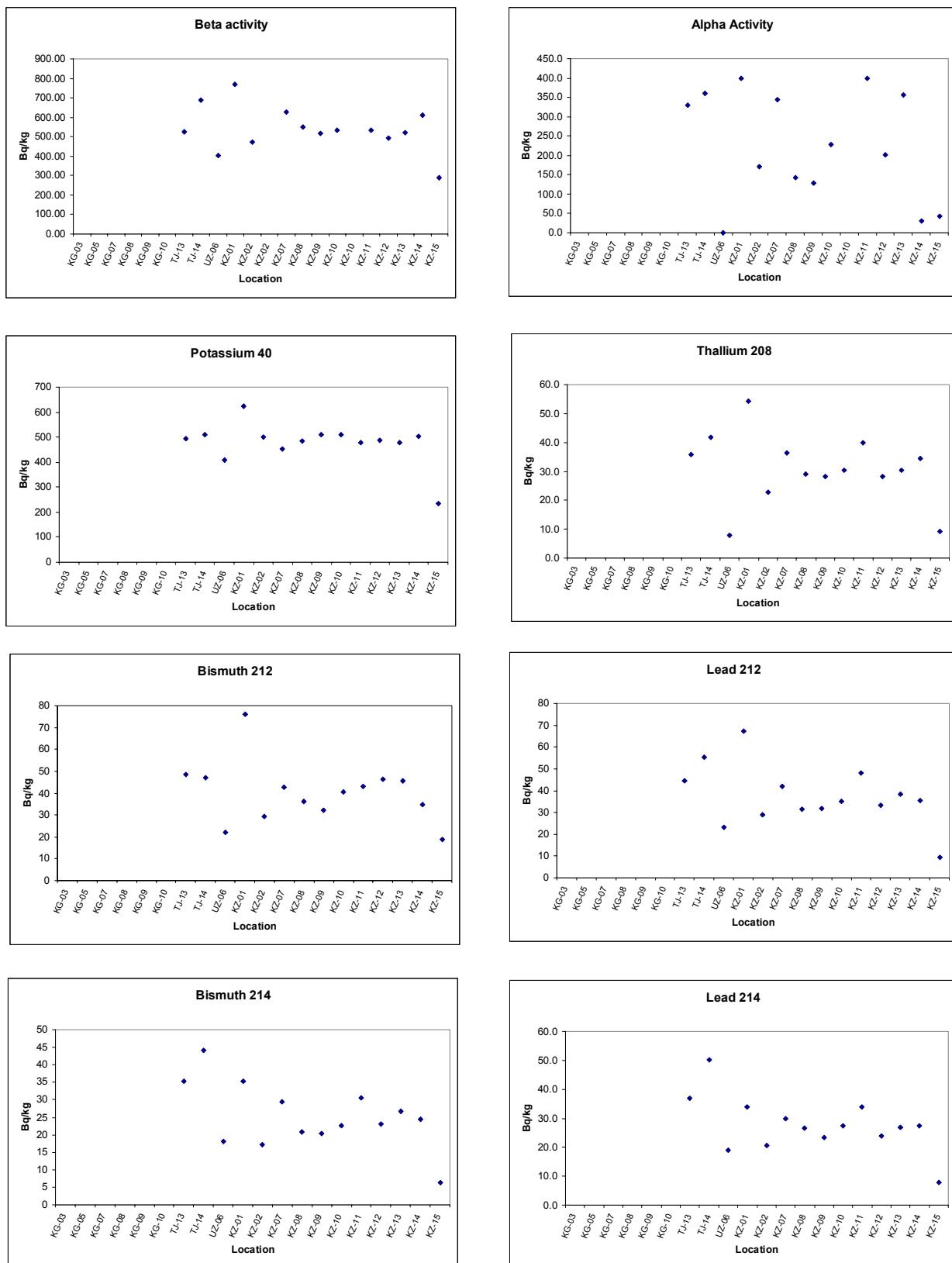


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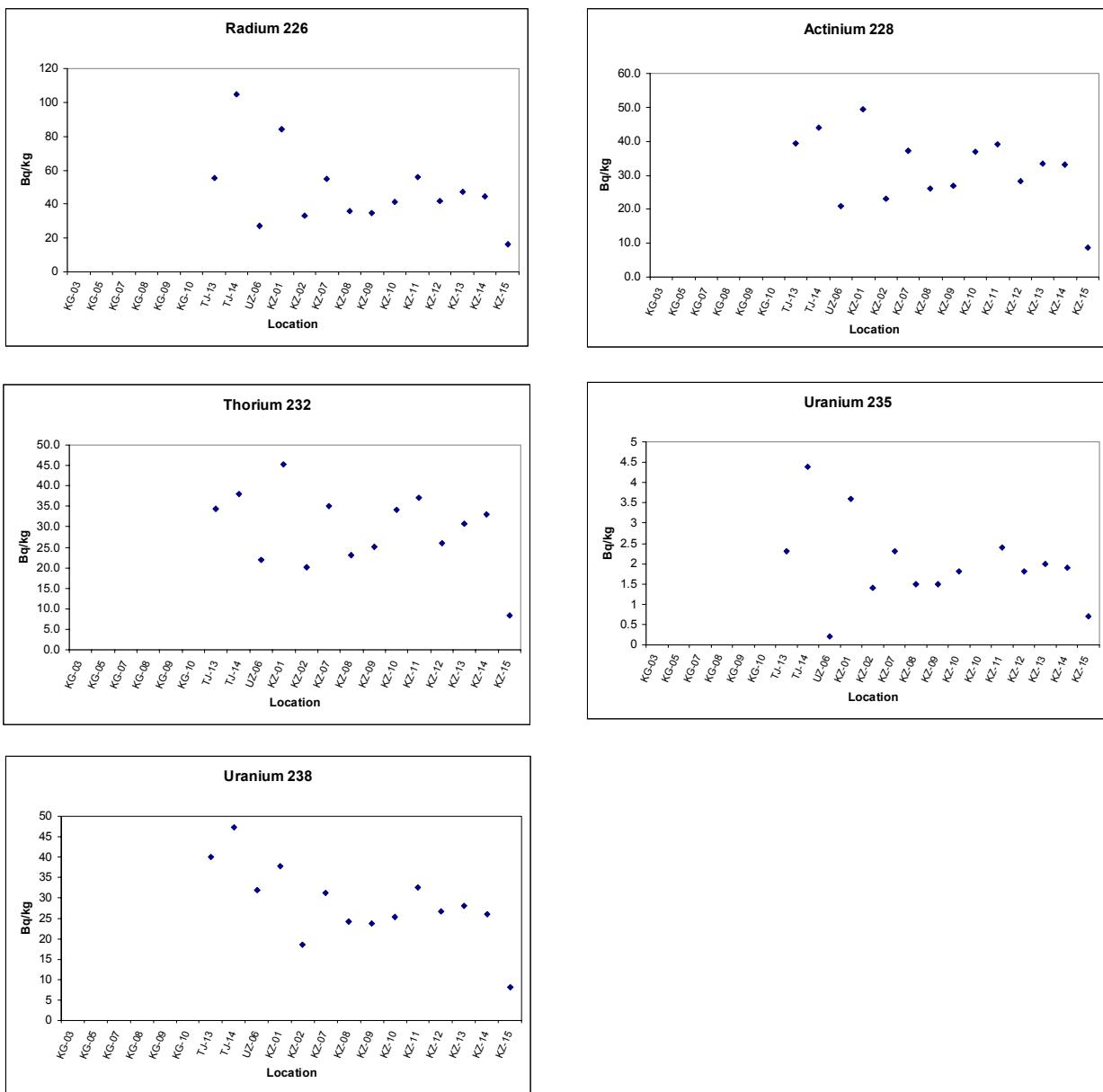
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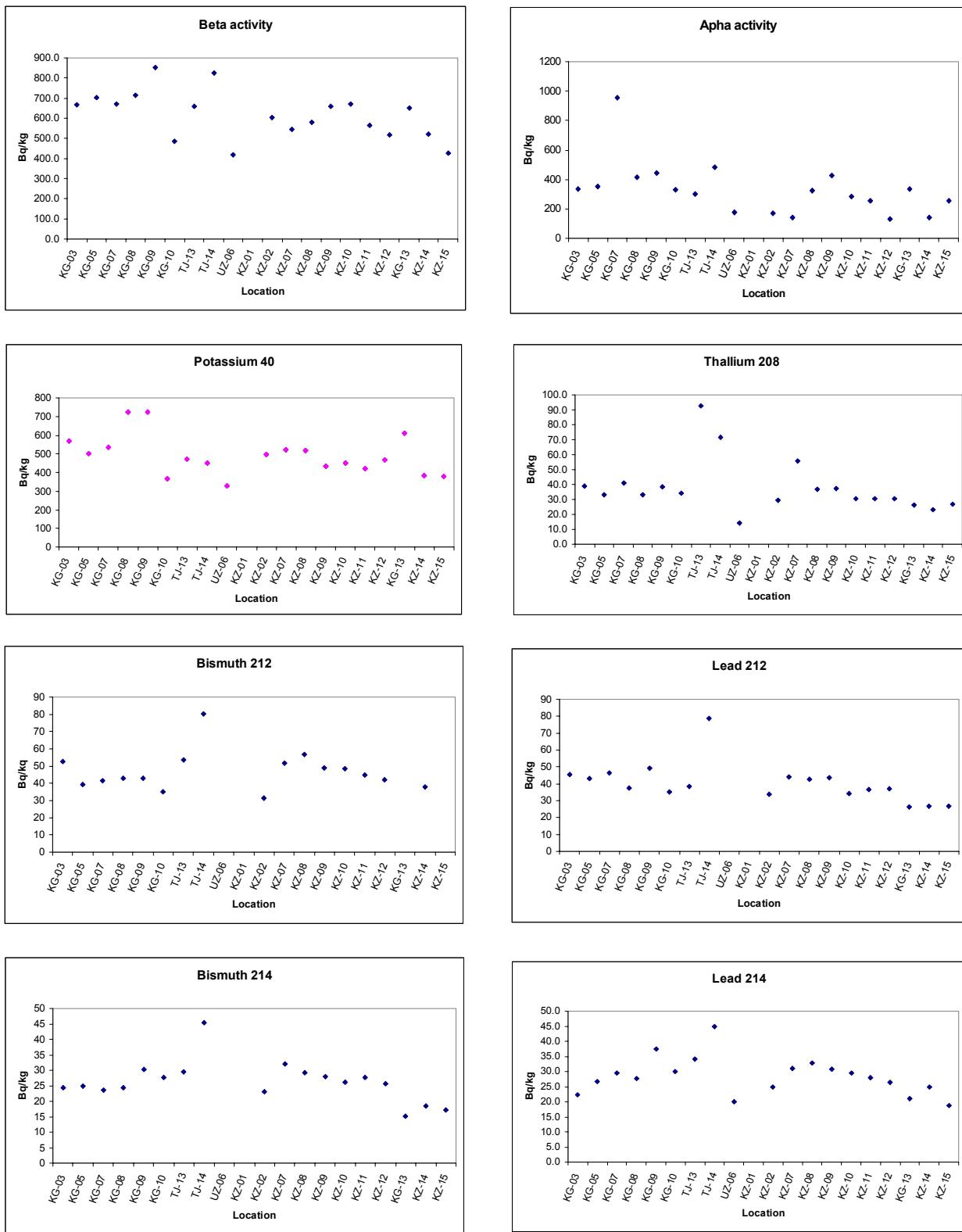
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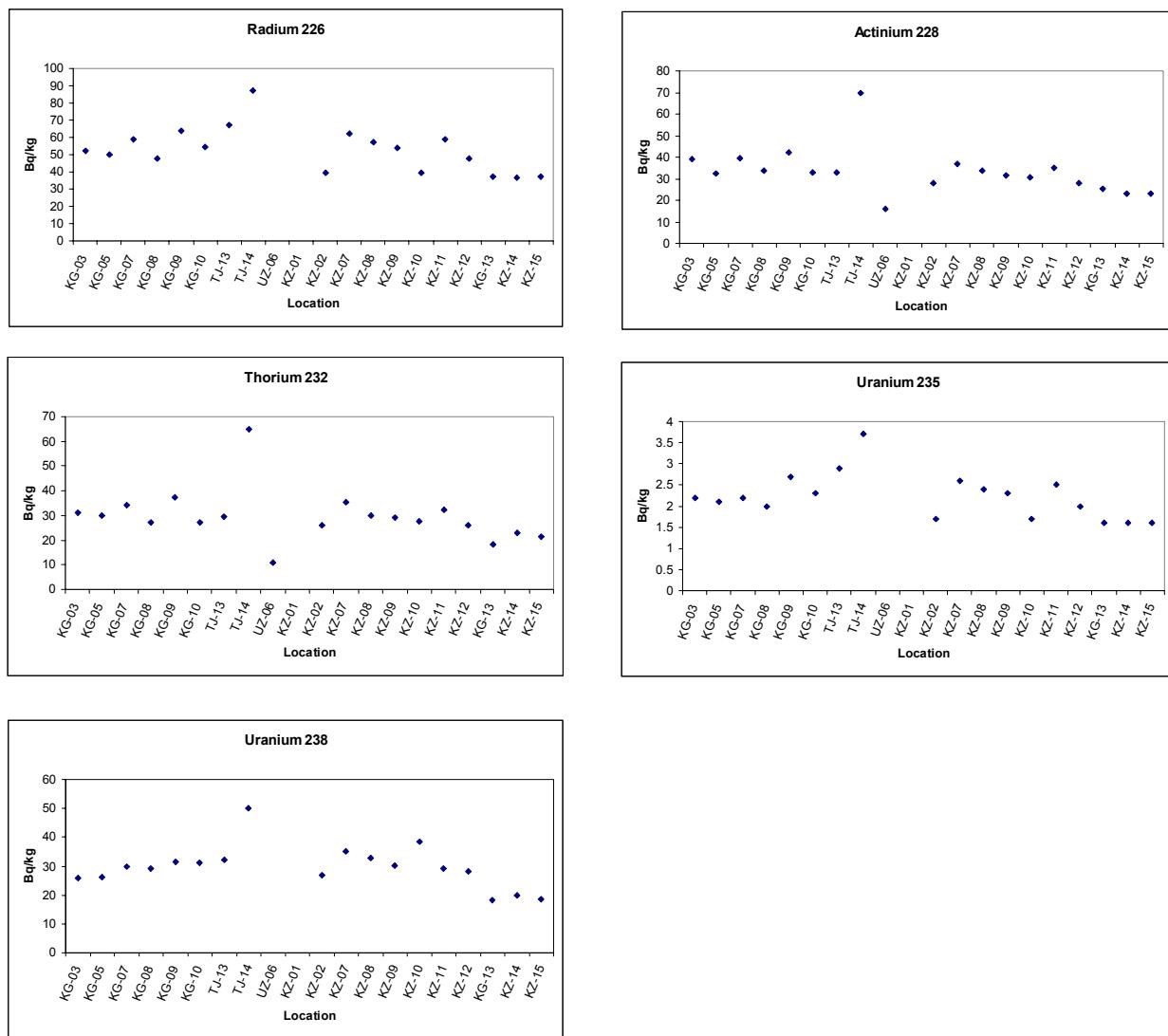


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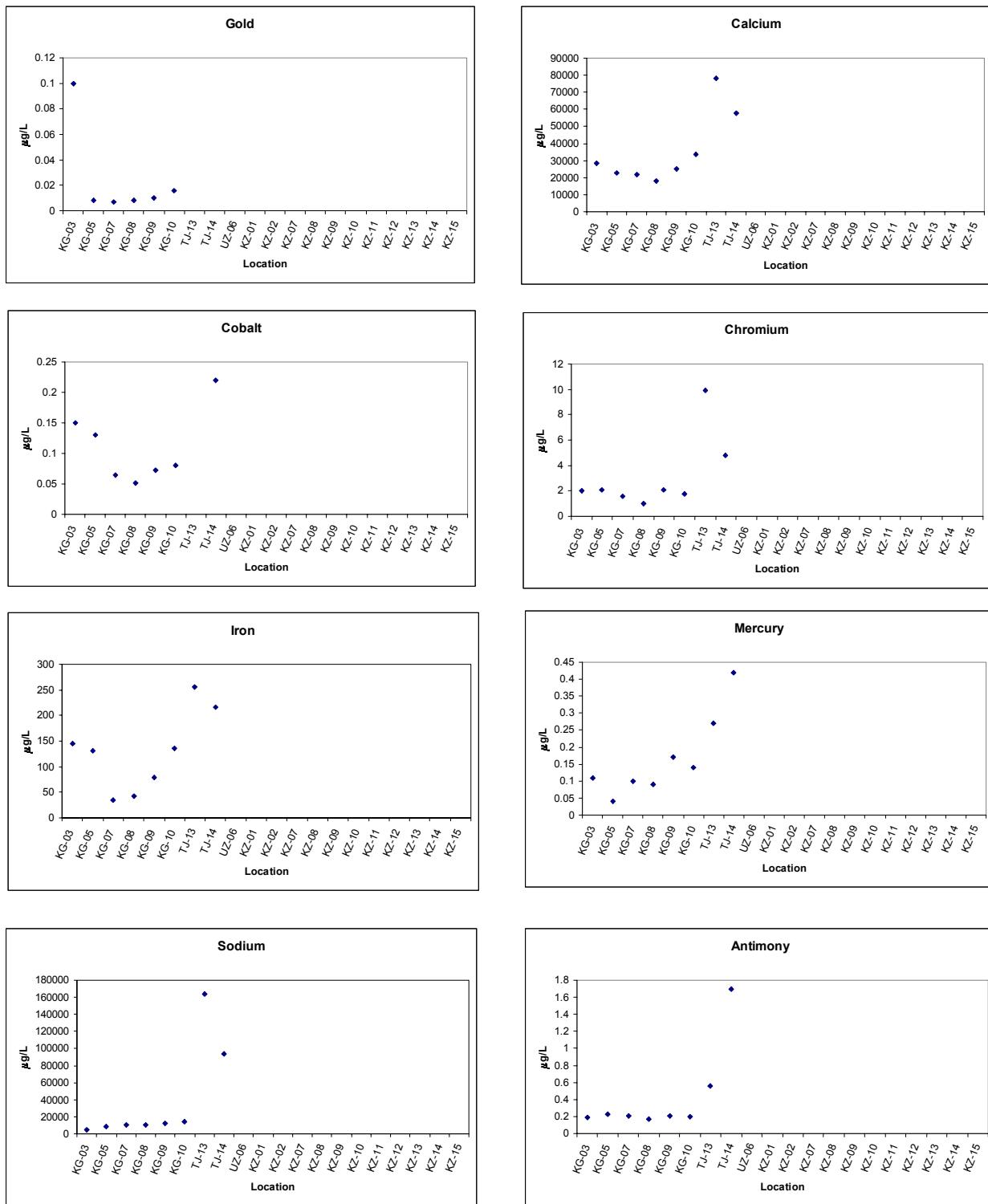
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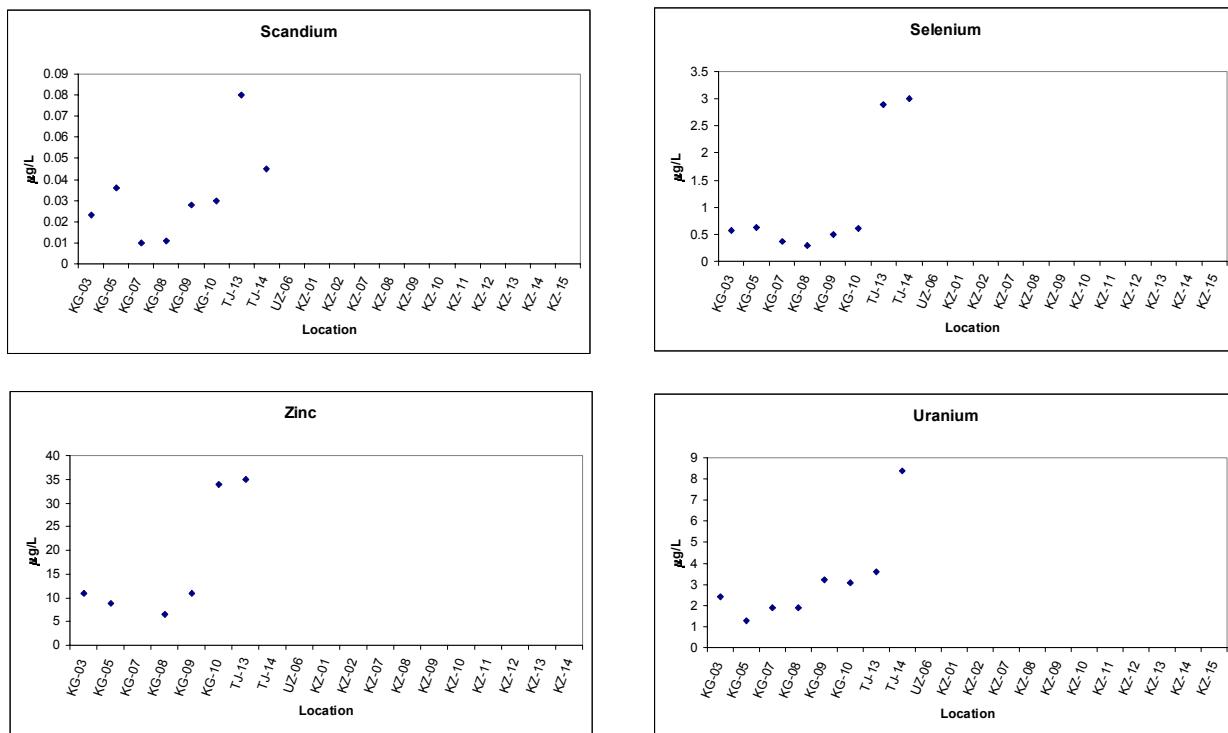
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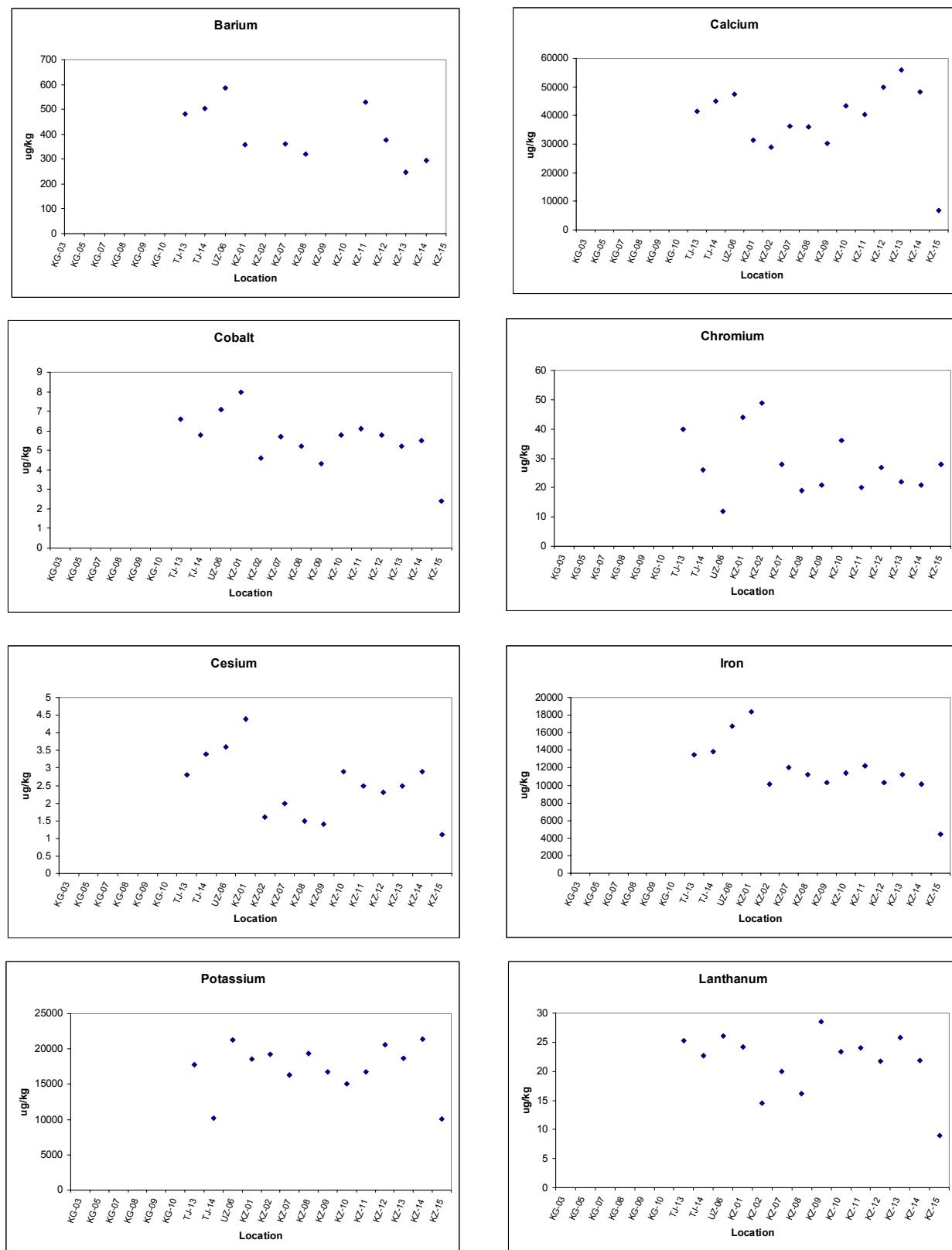
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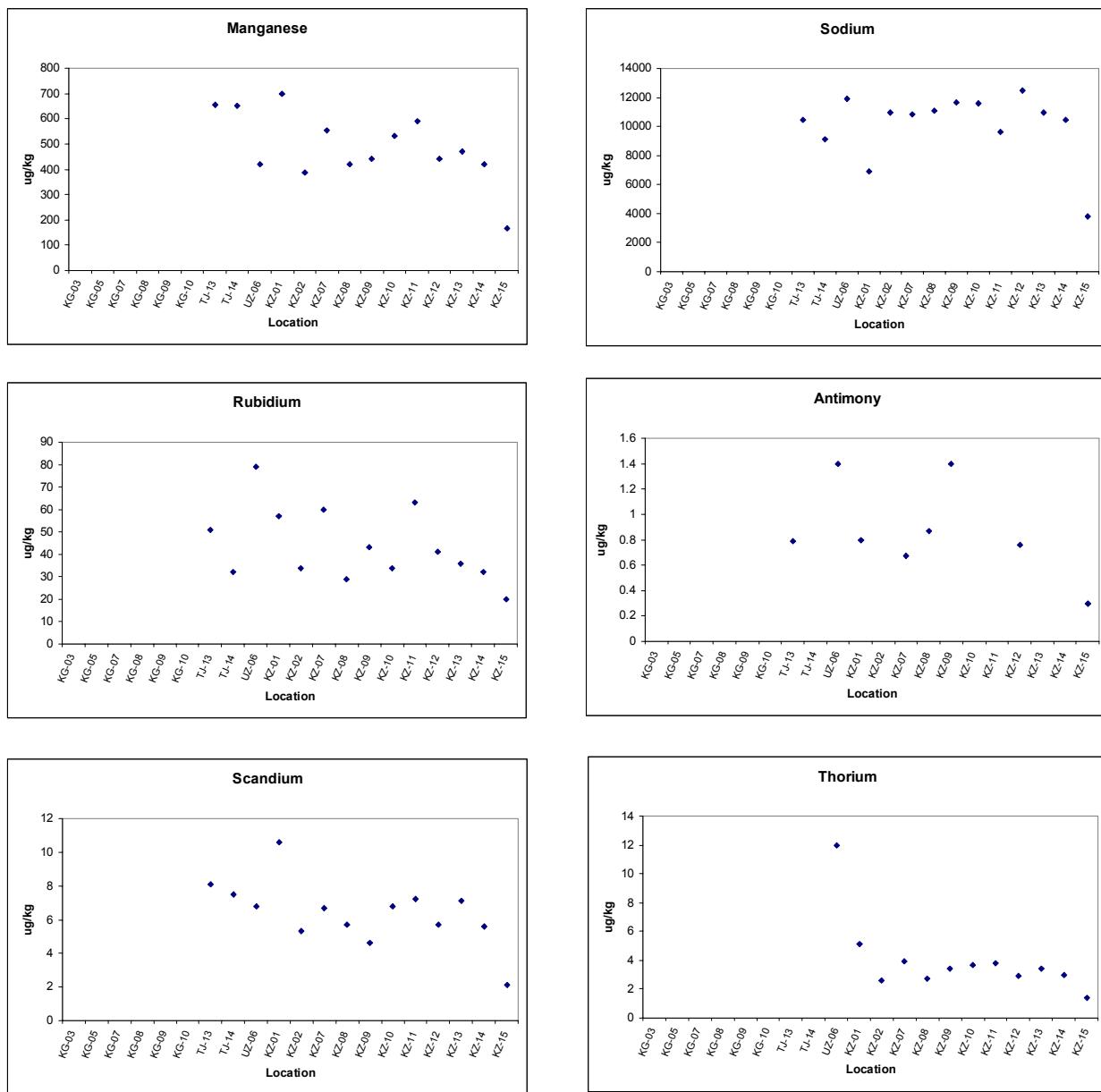


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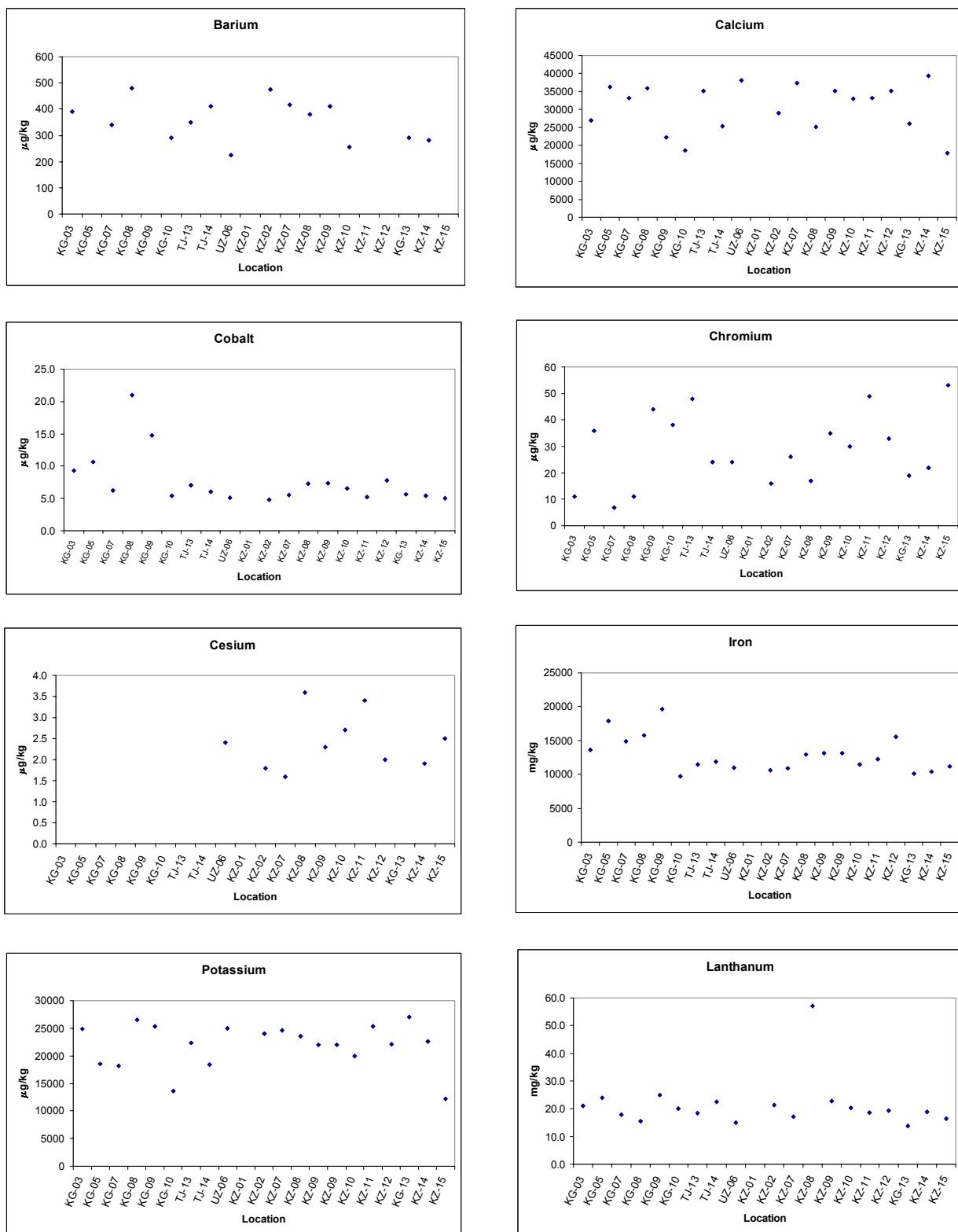
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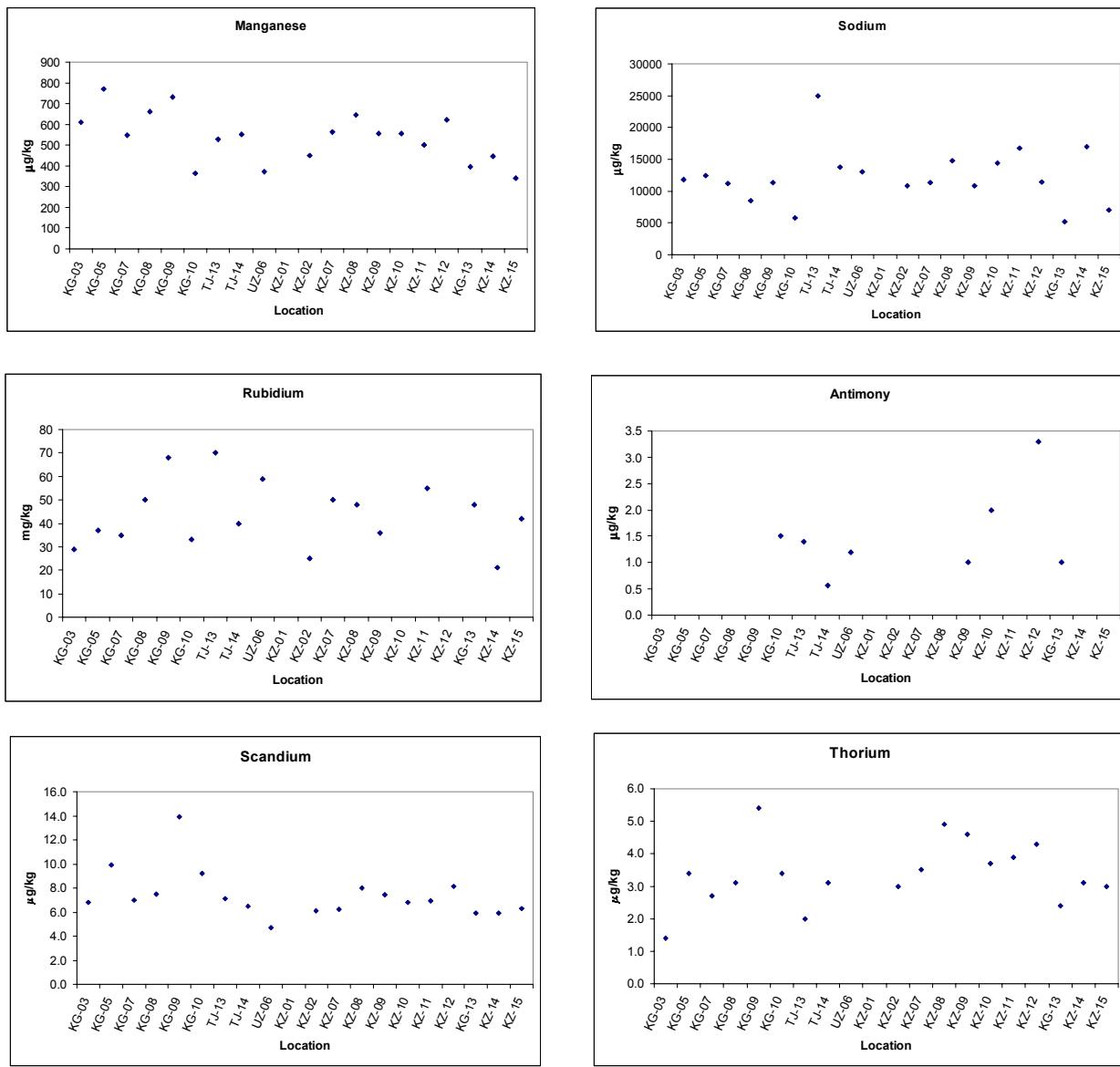
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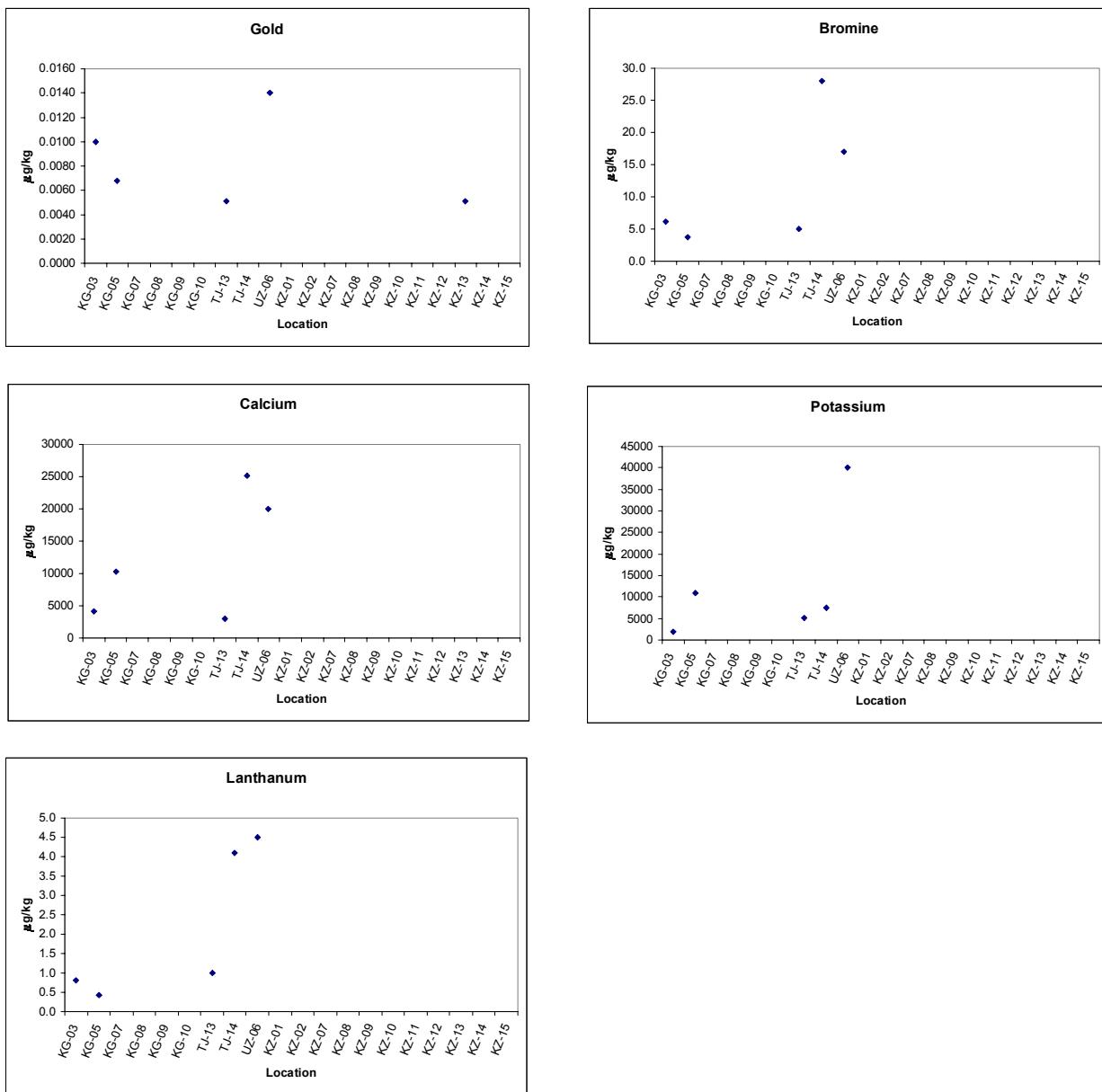


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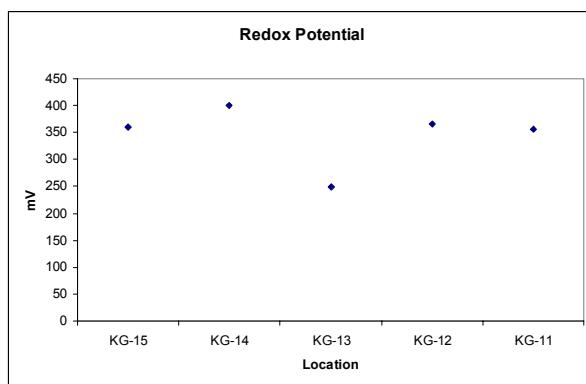
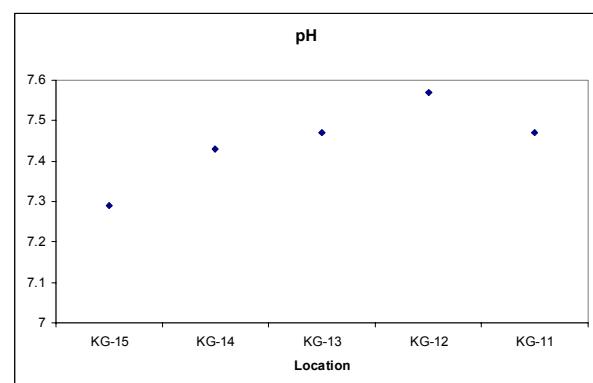
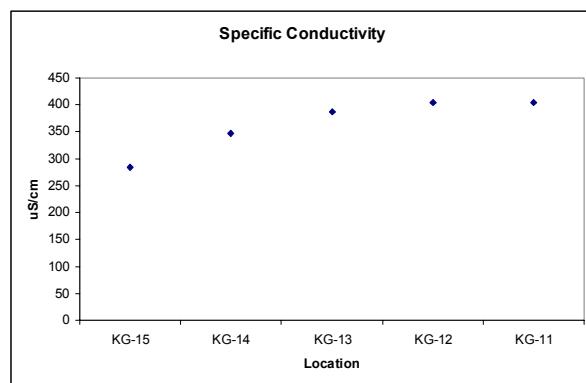
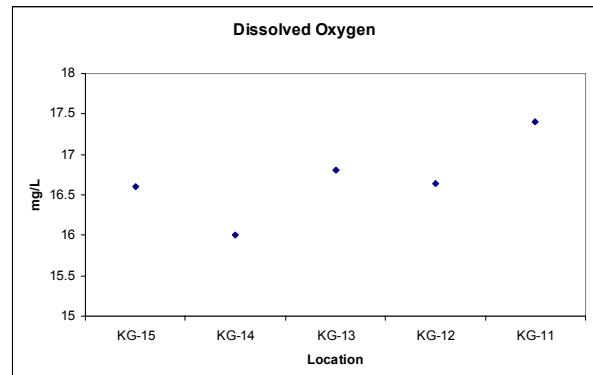
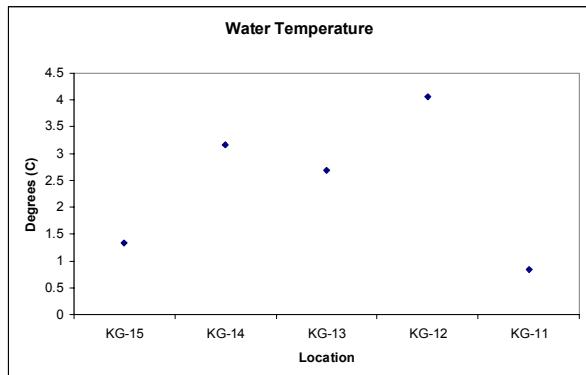


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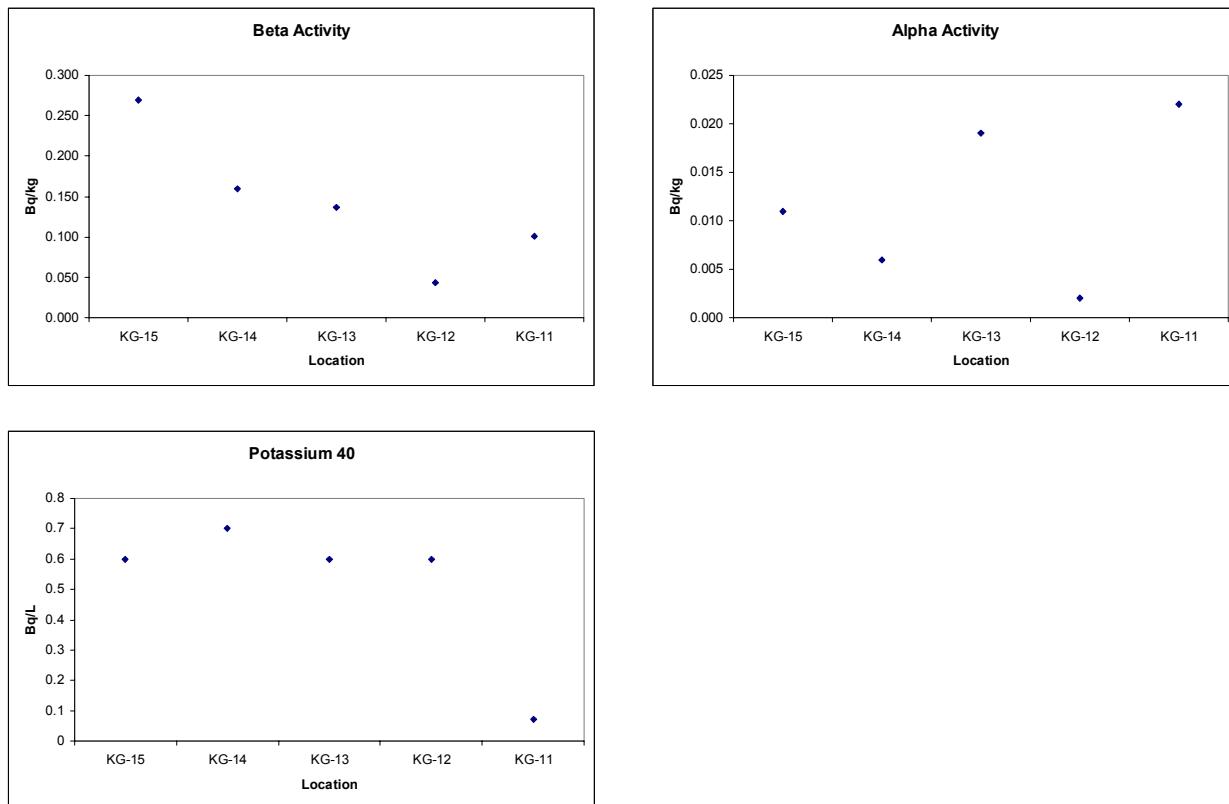
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Mailuu Su Basic Water Quality, Fall 2000



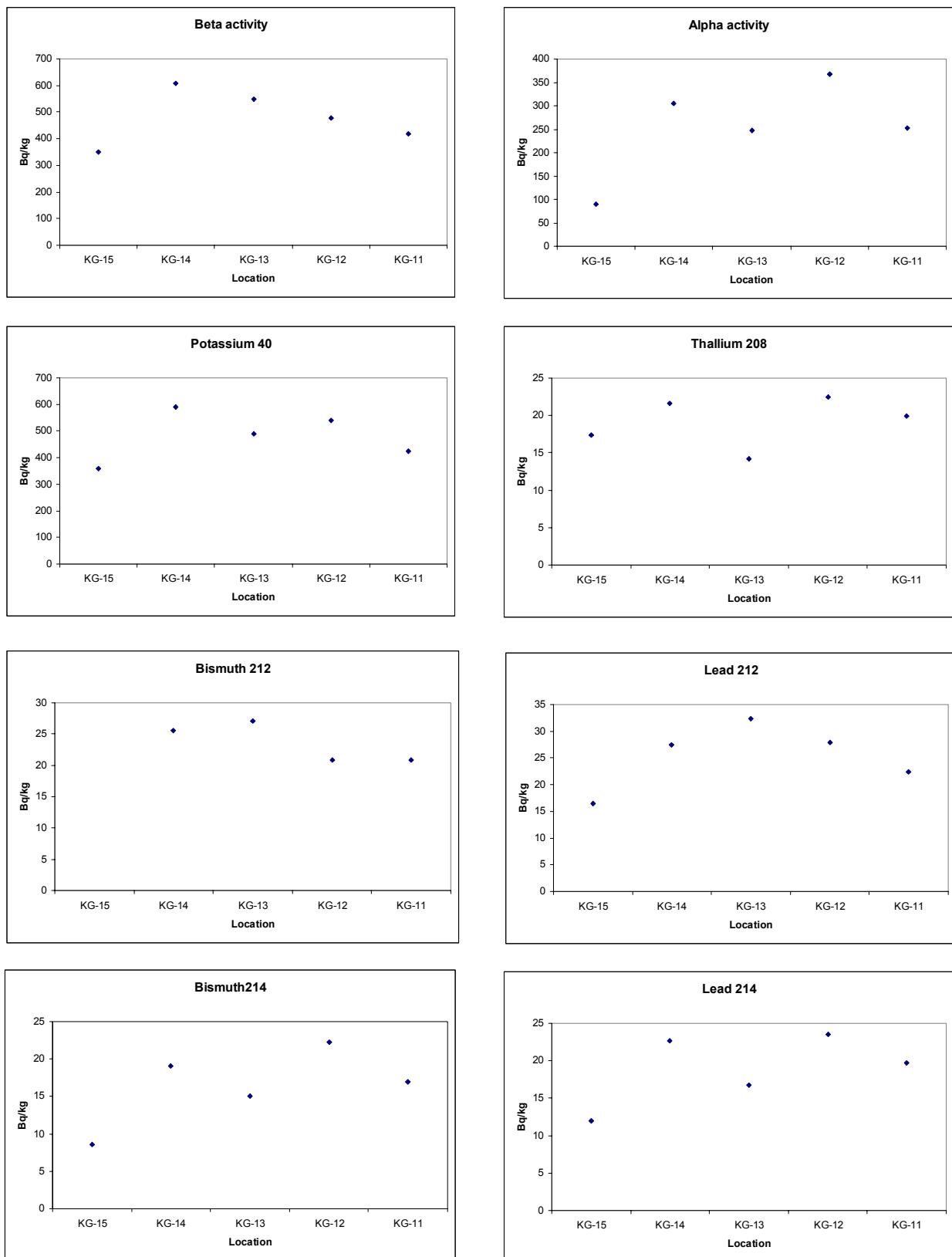
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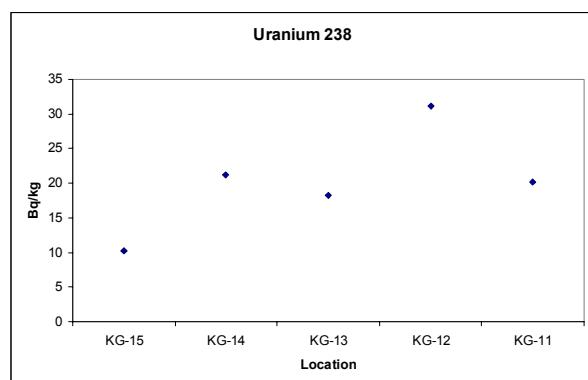
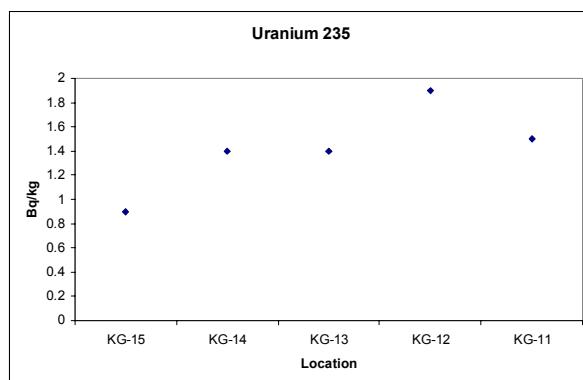
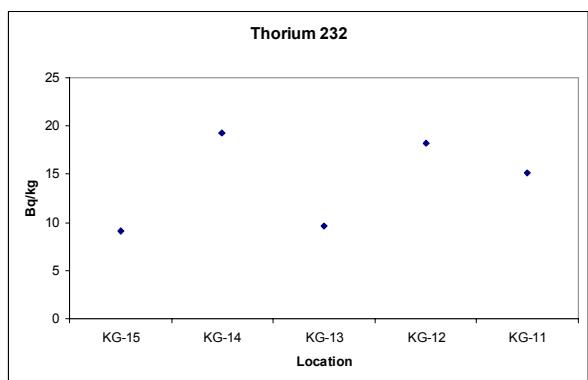
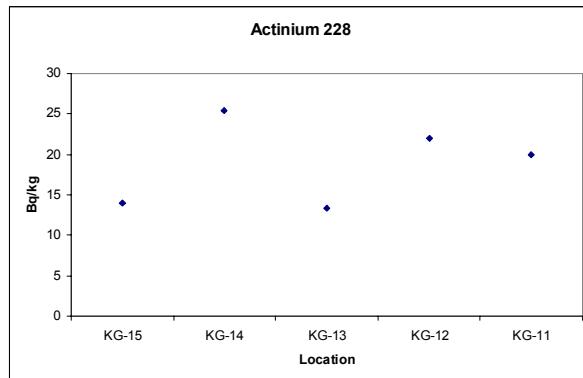
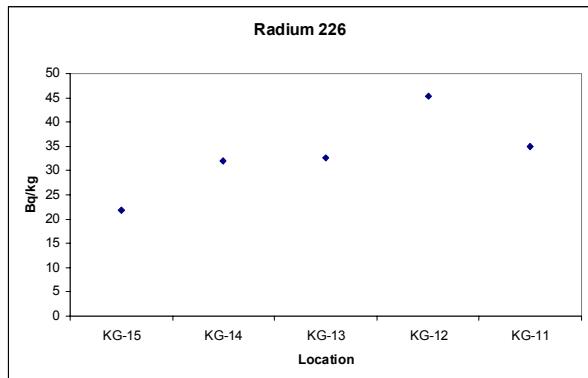
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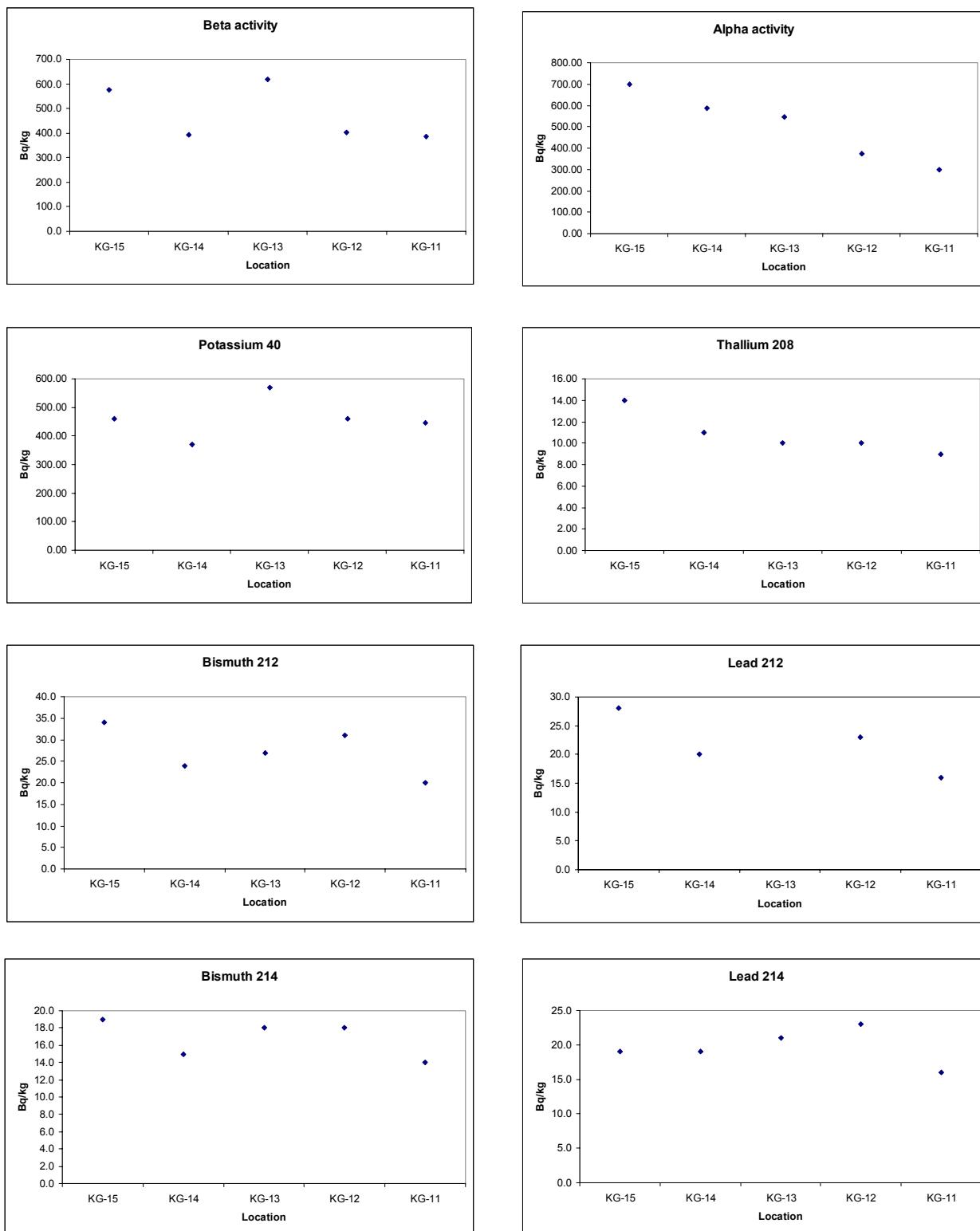
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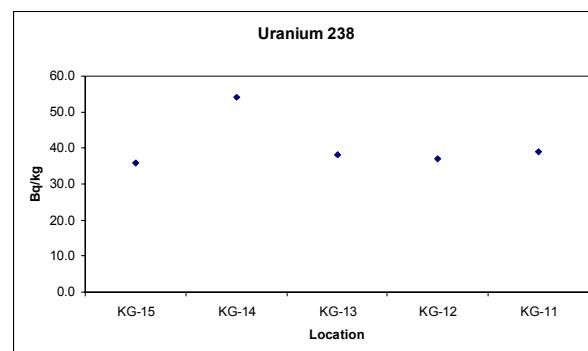
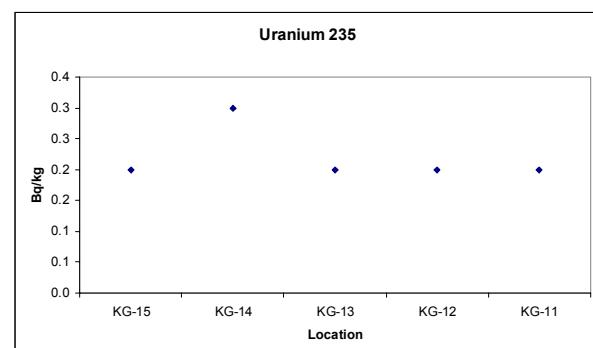
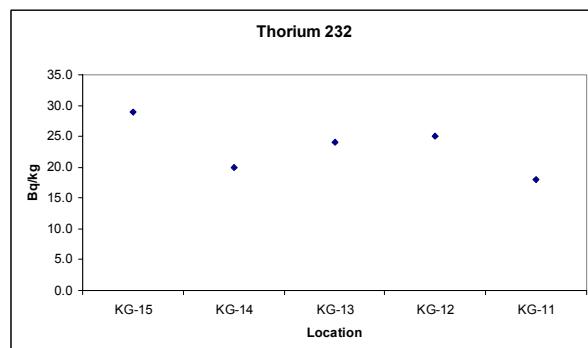
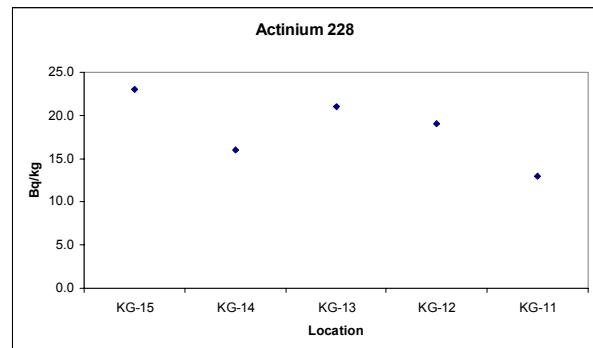
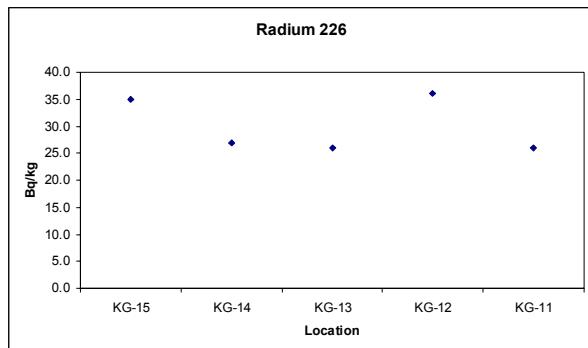
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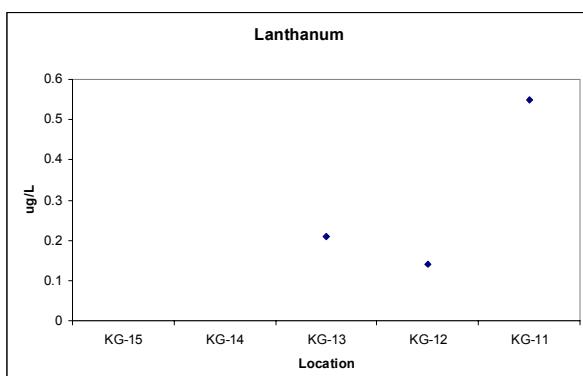
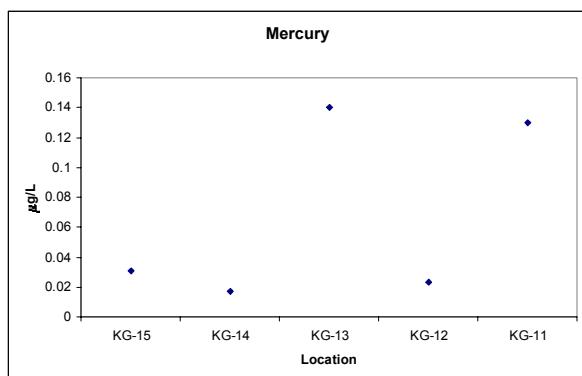
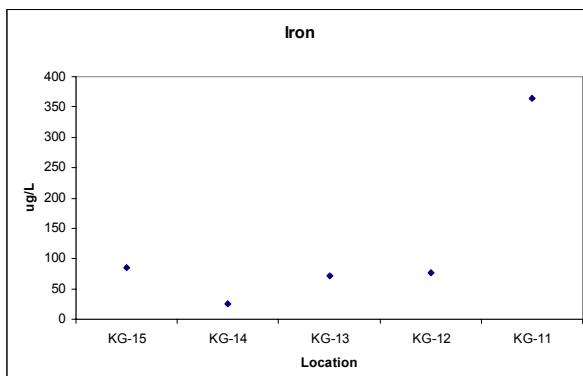
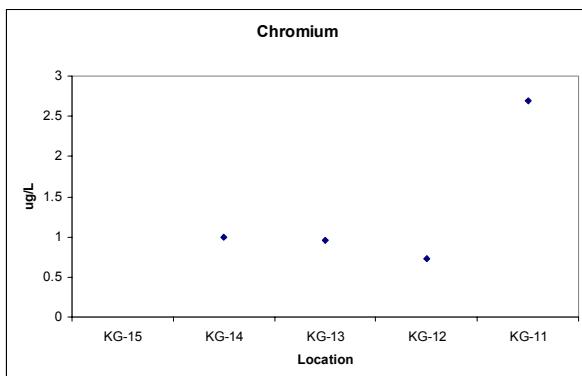
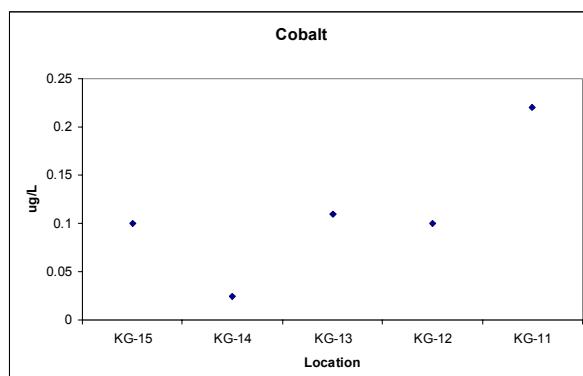
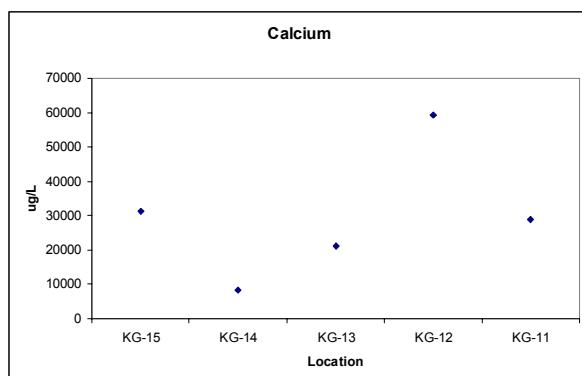
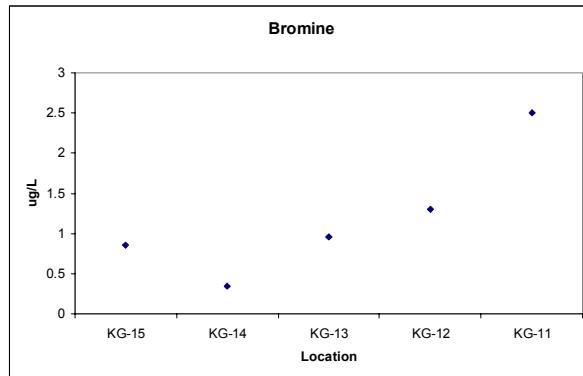
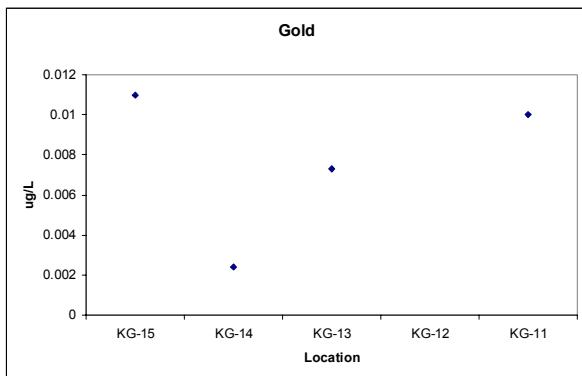
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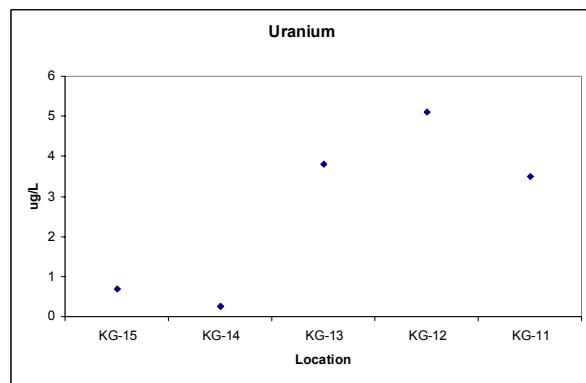
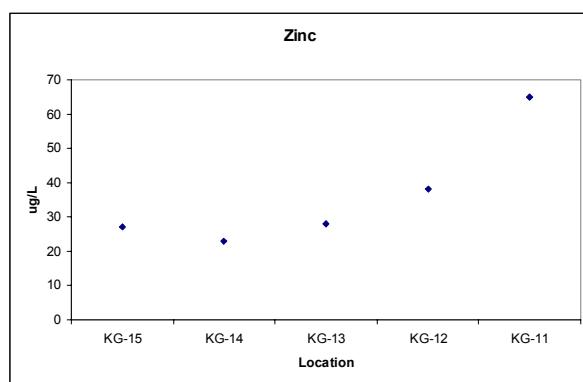
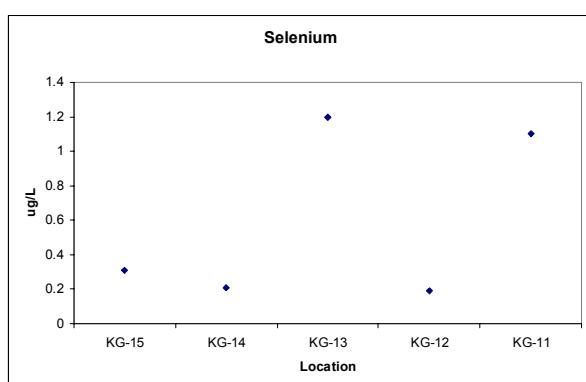
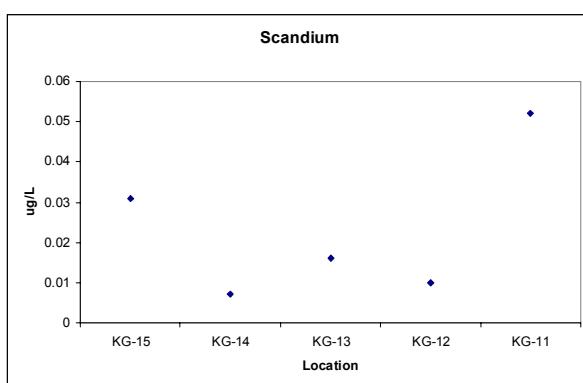
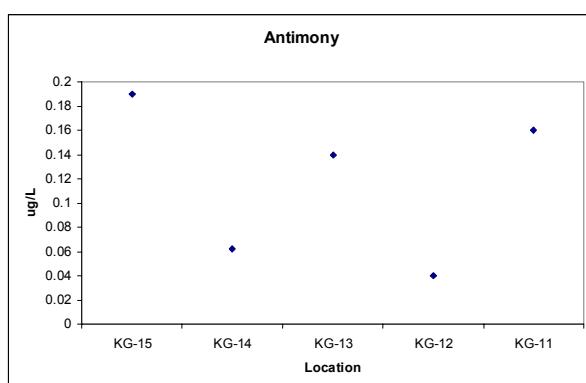
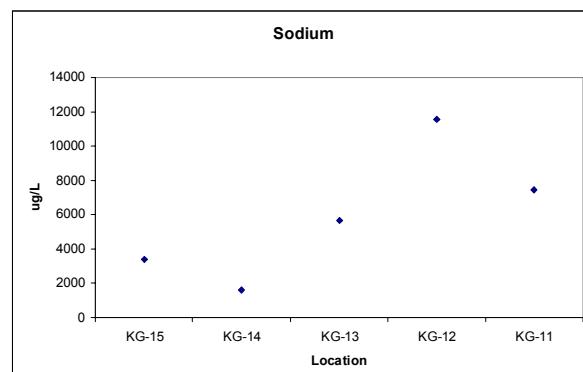
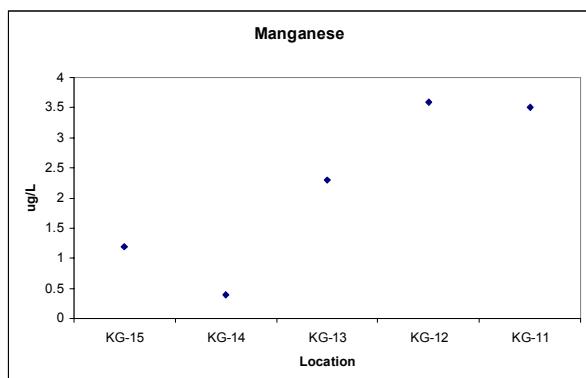
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Mailuu Su, Dissolved Metals Data, Spring 2001



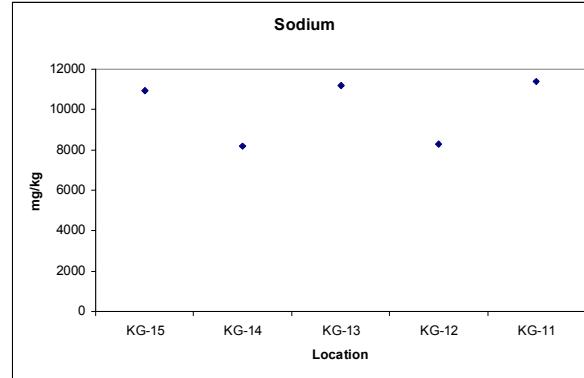
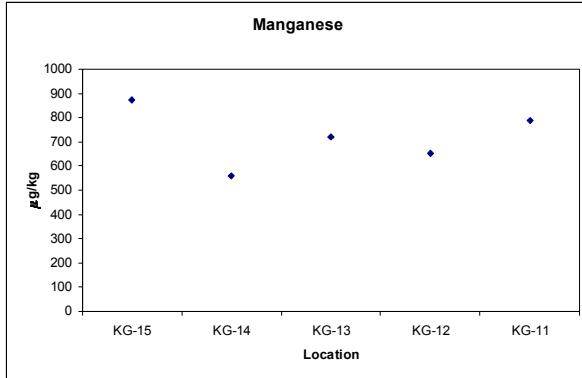
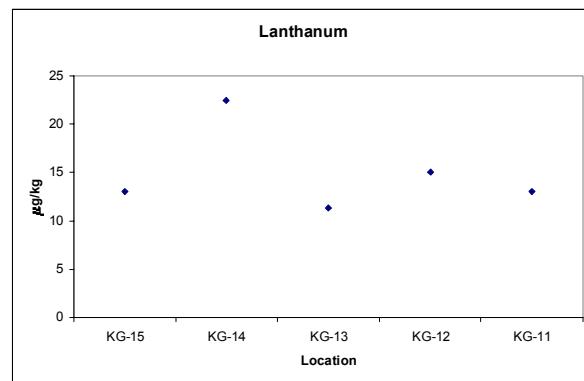
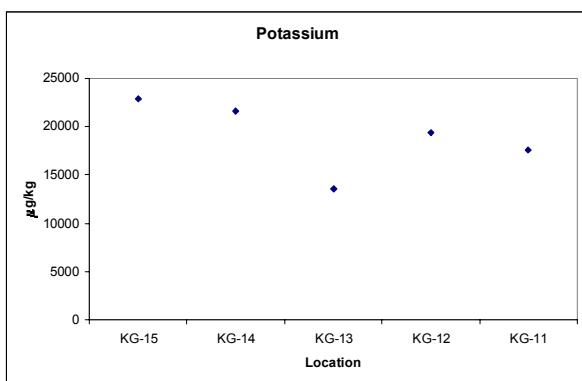
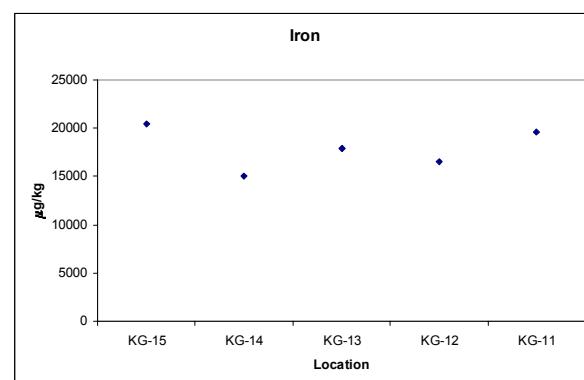
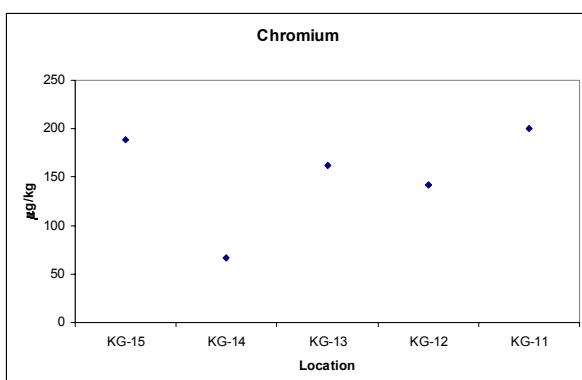
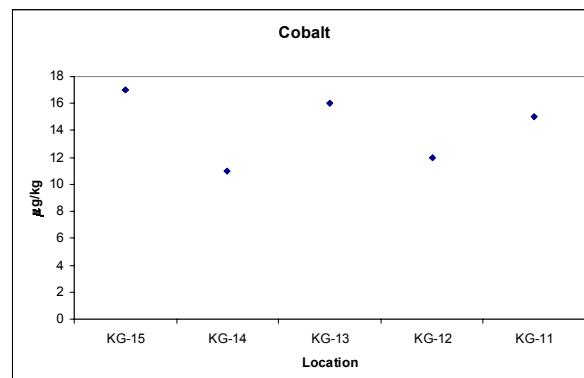
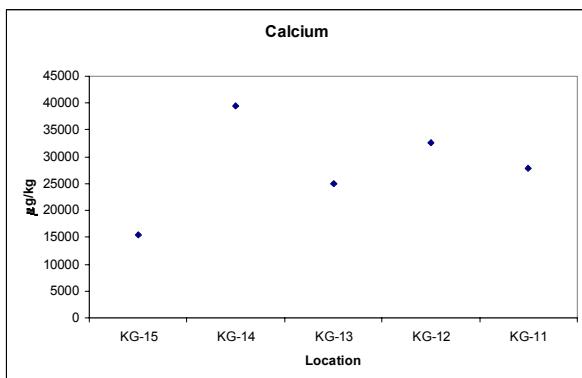
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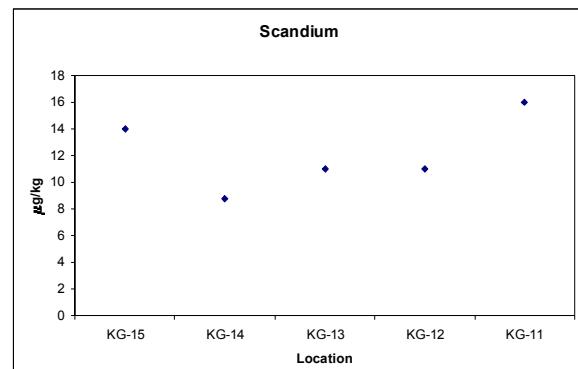
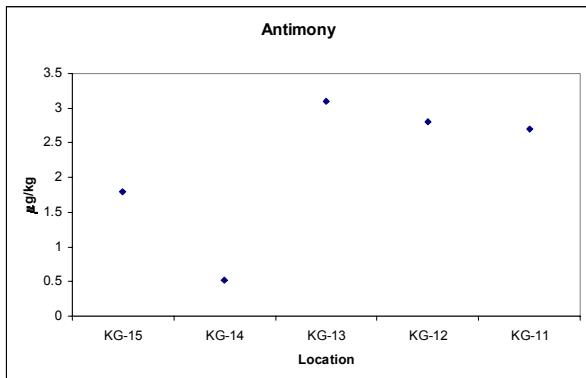


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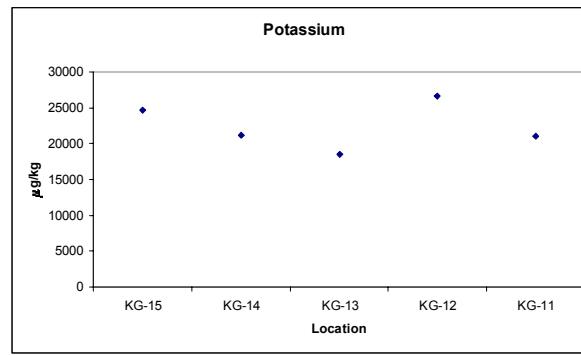
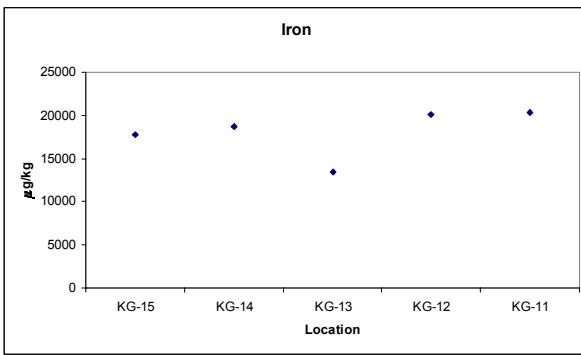
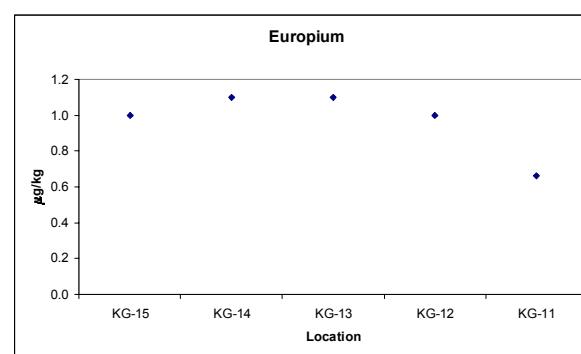
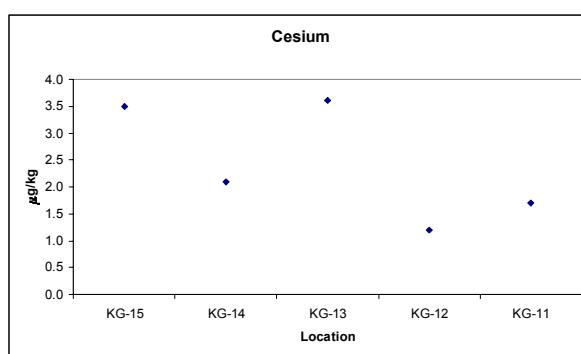
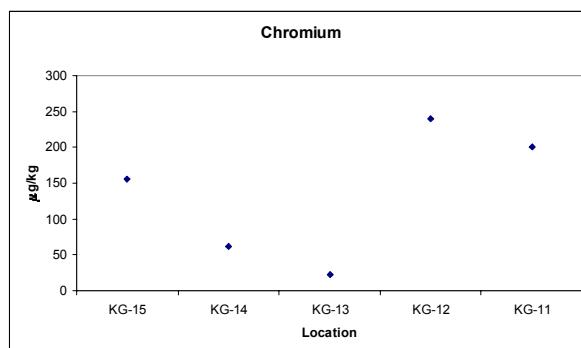
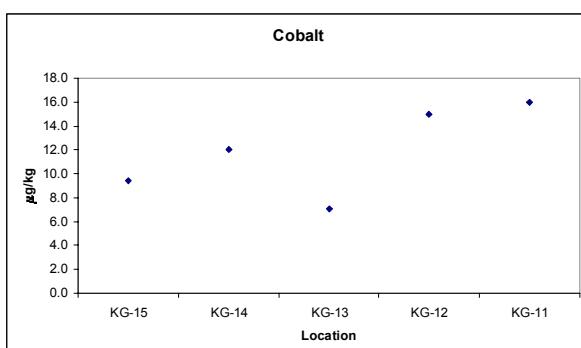
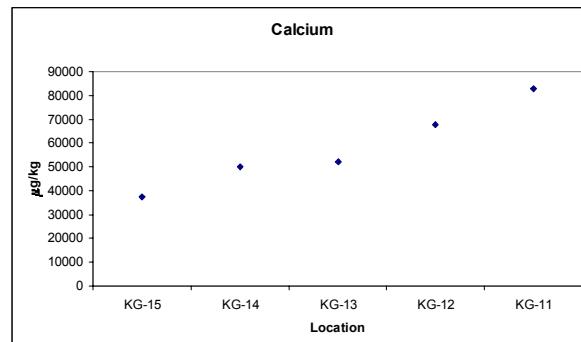
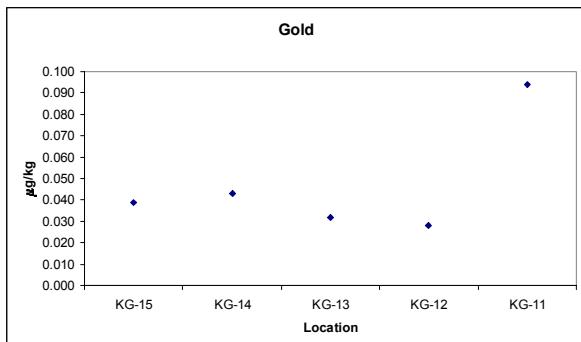


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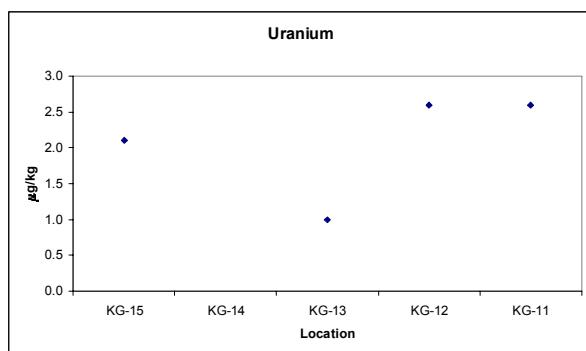
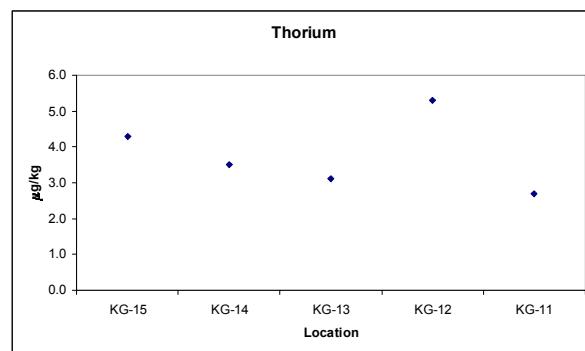
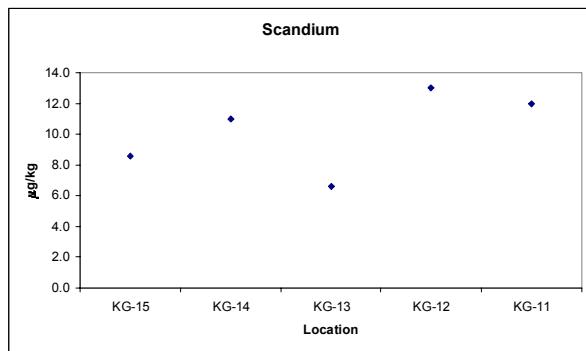
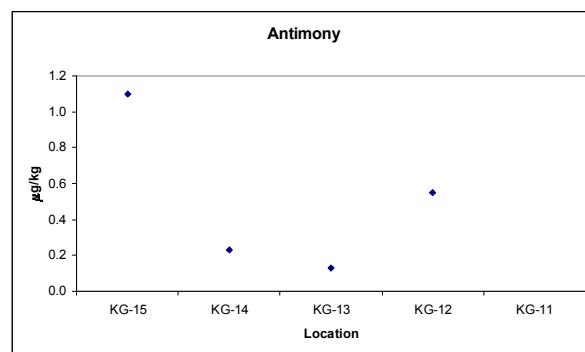
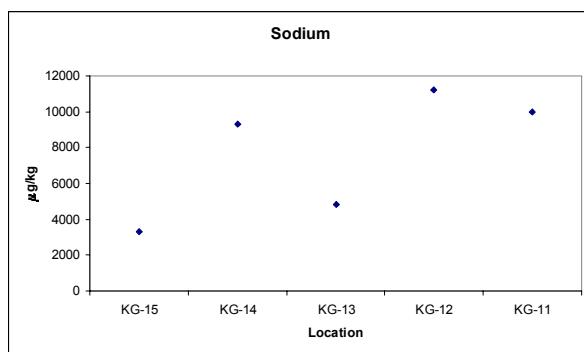
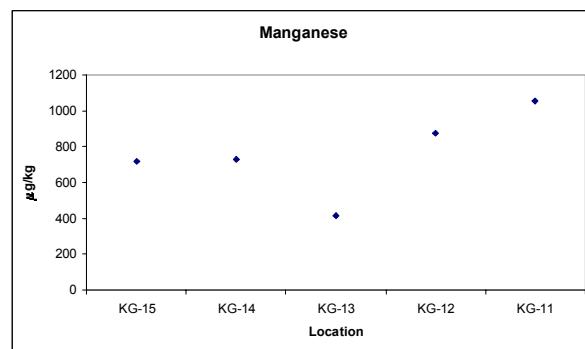
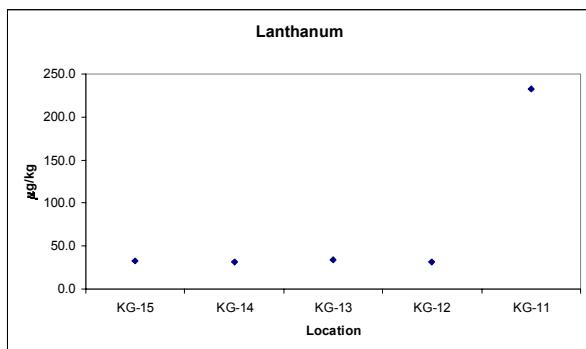
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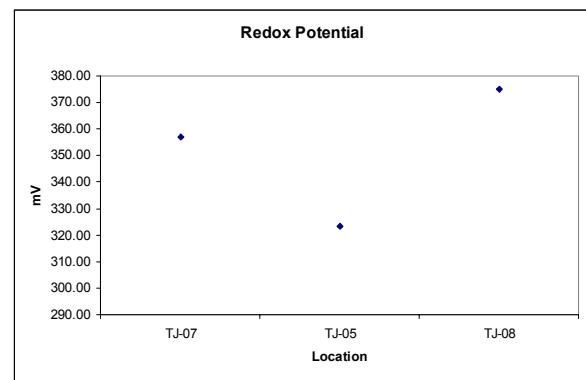
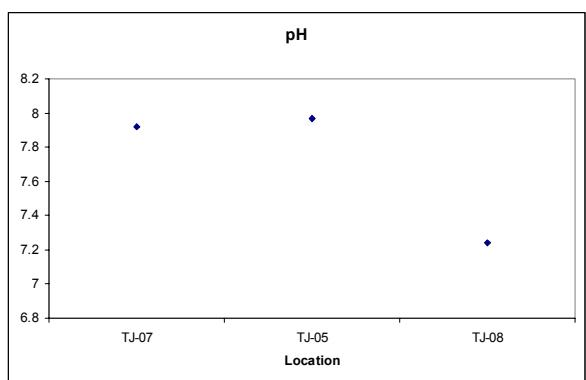
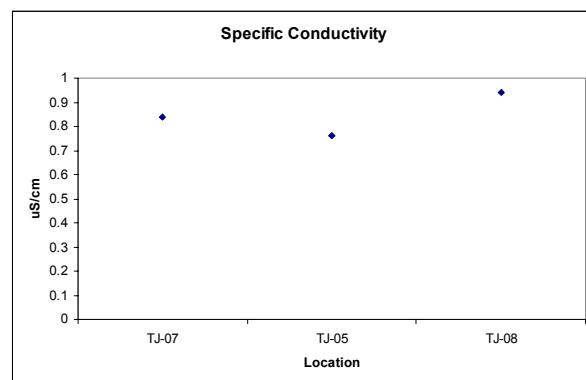
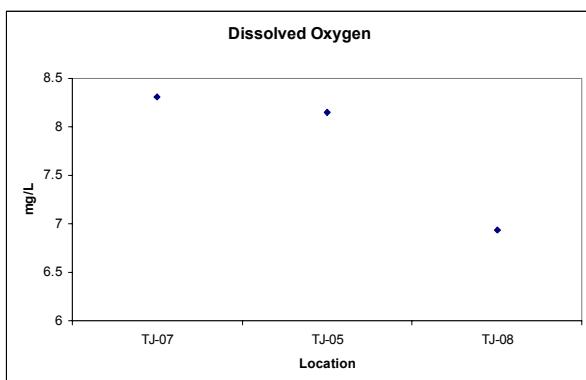
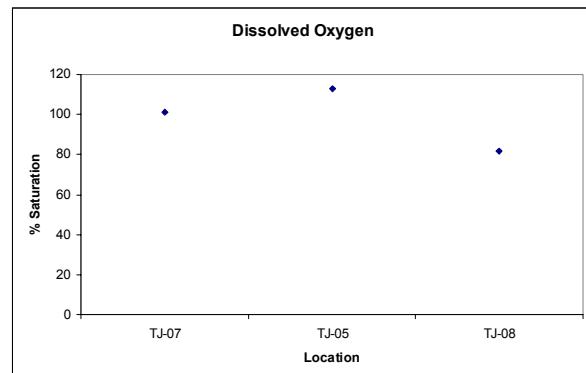
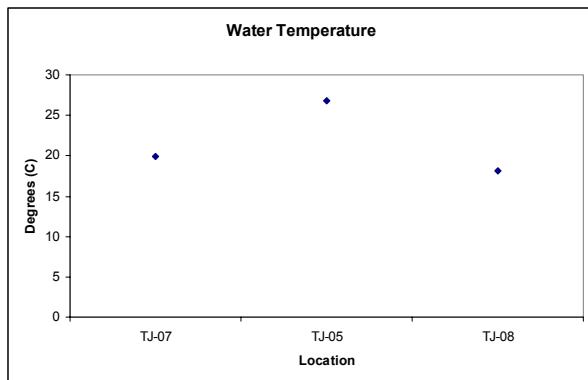
Provisional Data

Mailuu Su, Soils Metals Data, Spring 2001, continued



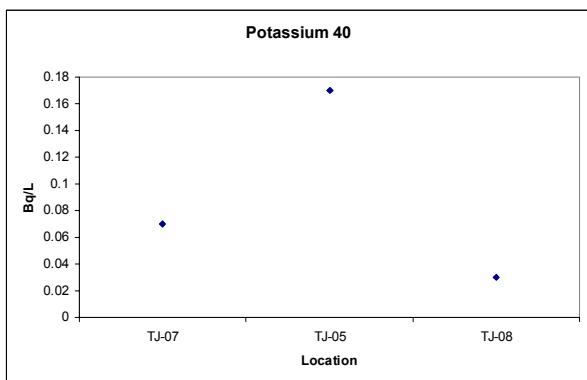
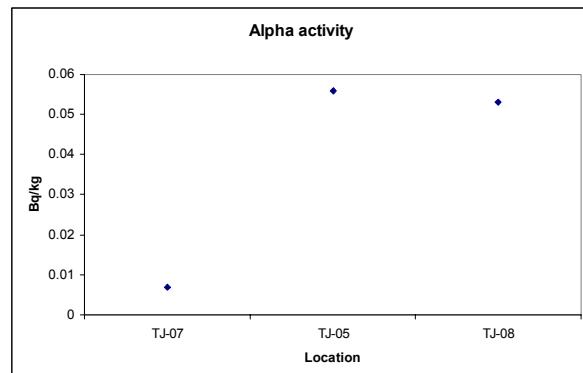
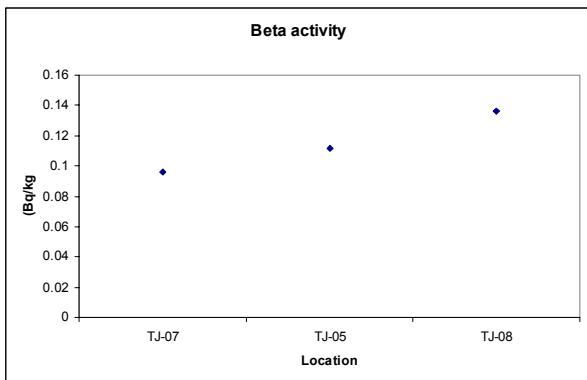
Provisional Data

South Tajikistan, Basic Water Quality, Spring 2001



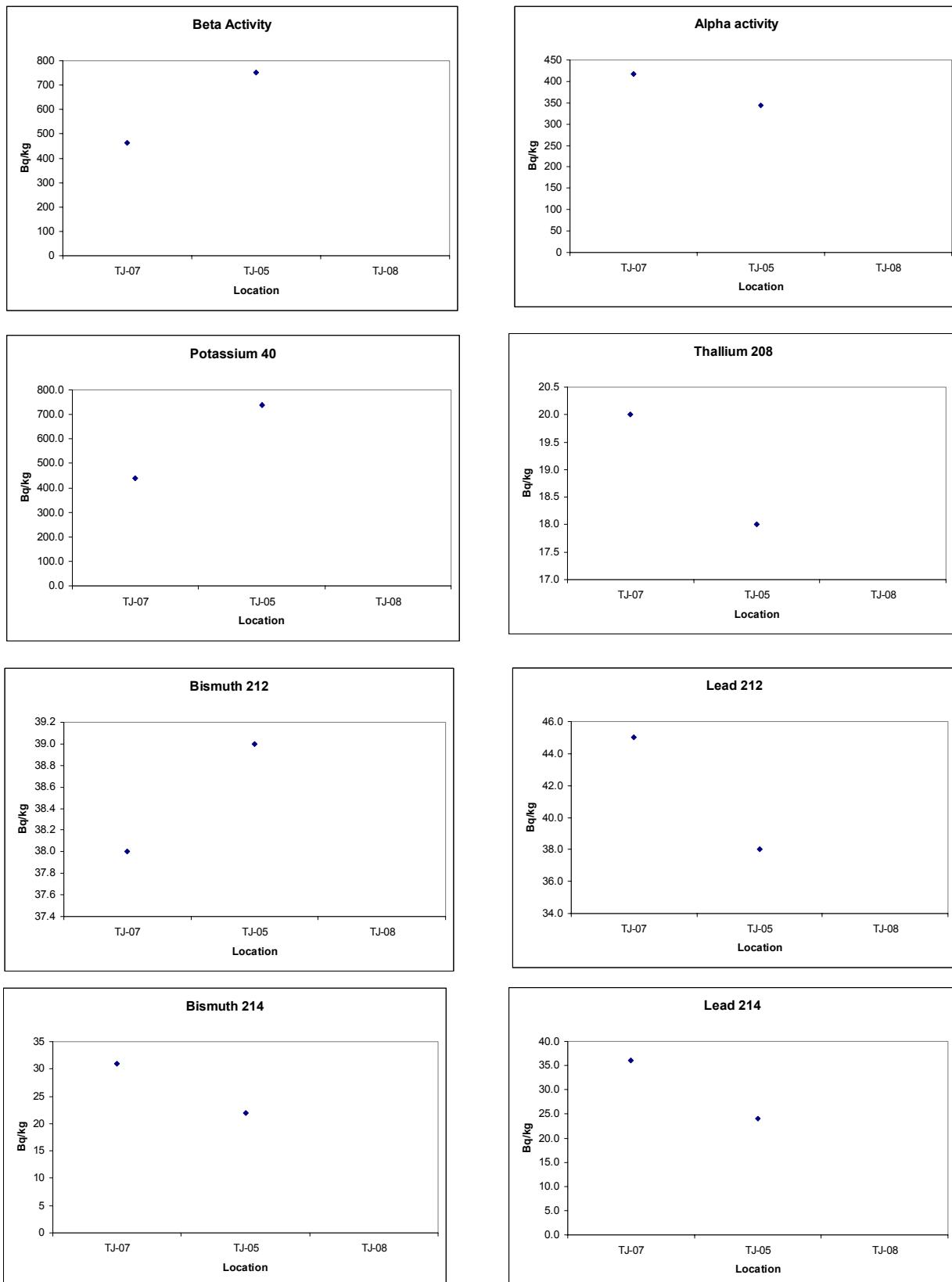
Provisional Data

South Tajikistan, Dissolved Radionuclides Data, Spring 2001



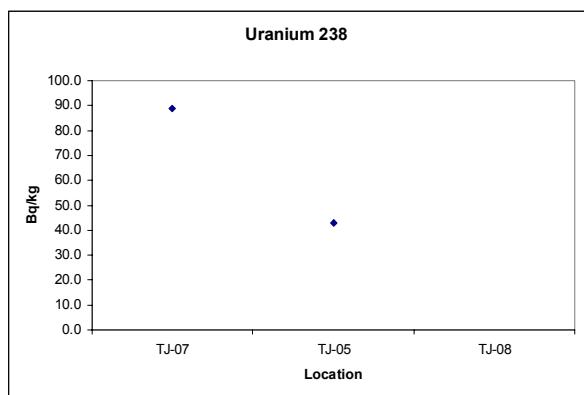
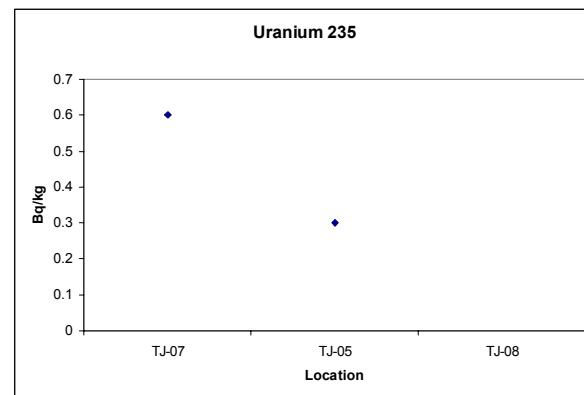
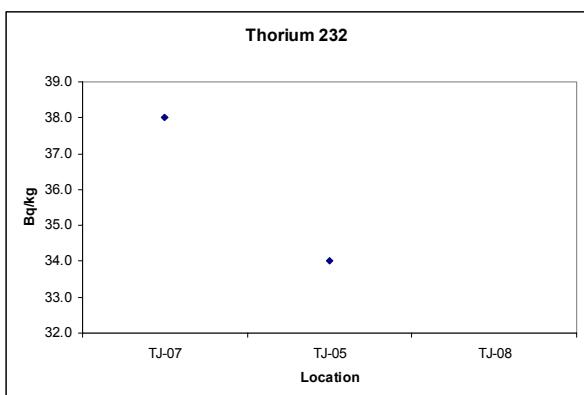
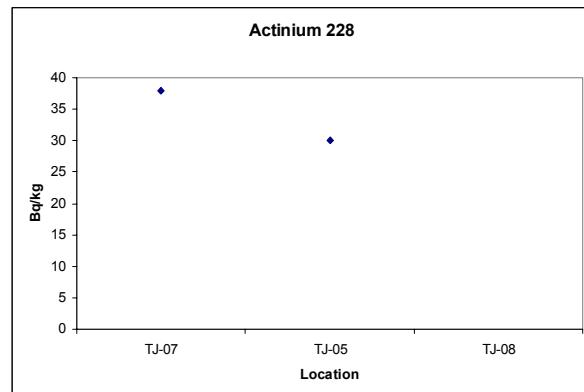
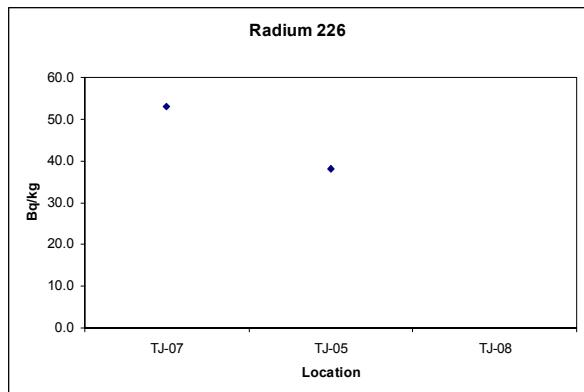
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South Tajikistan, Bottom Sediments Radionuclides Data, Spring 2001



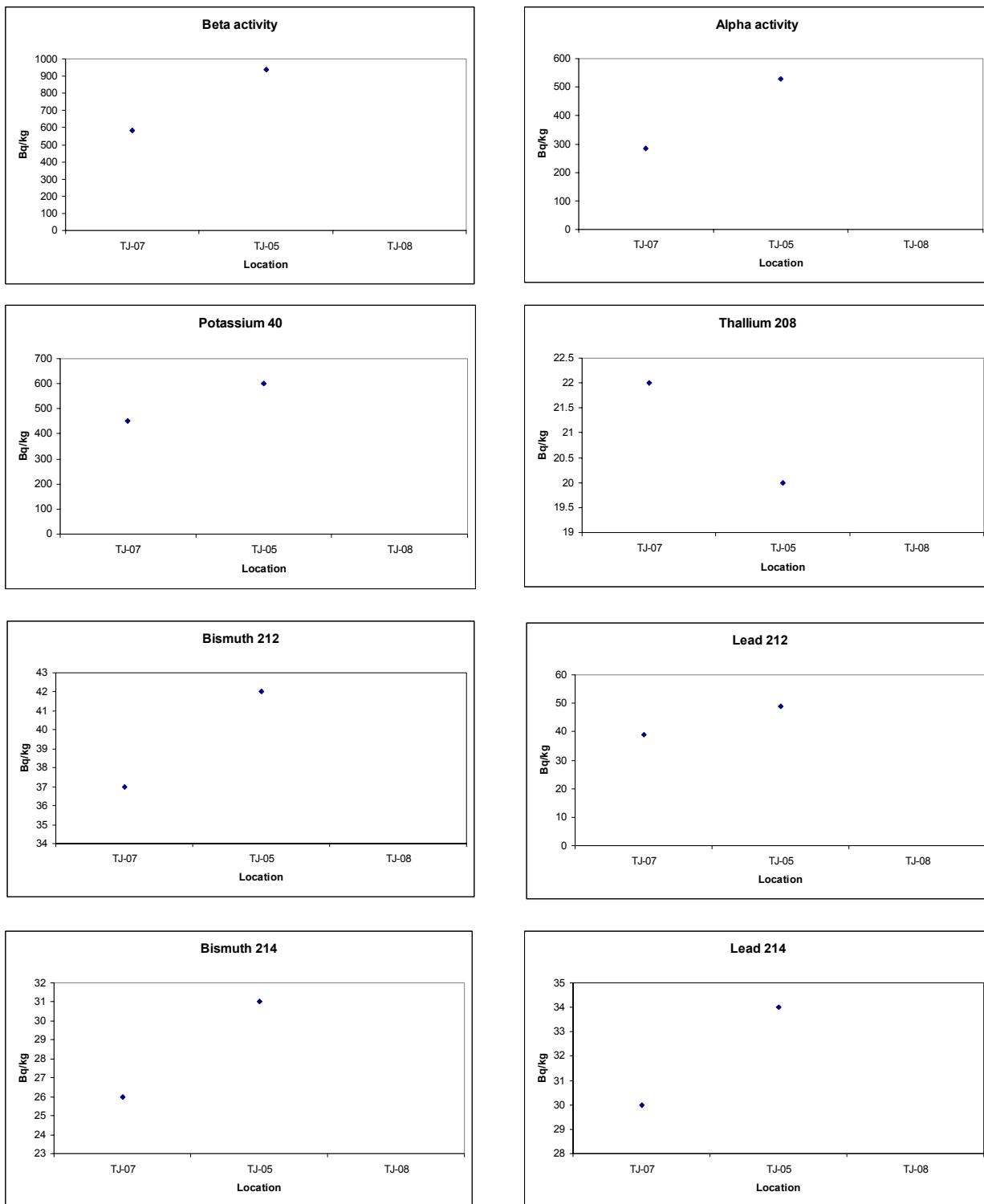
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South Tajikistan, Bottom Sediments Radionuclides Data, Spring 2001, continued



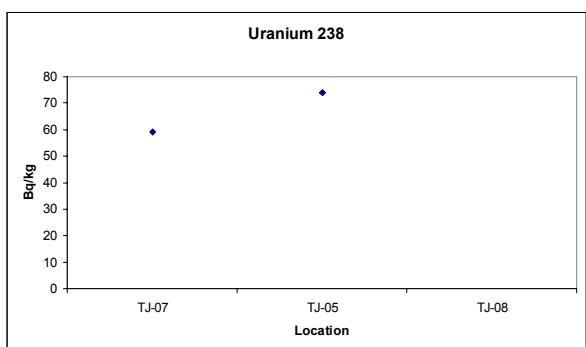
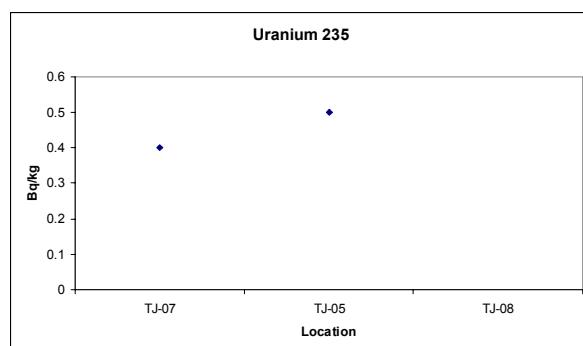
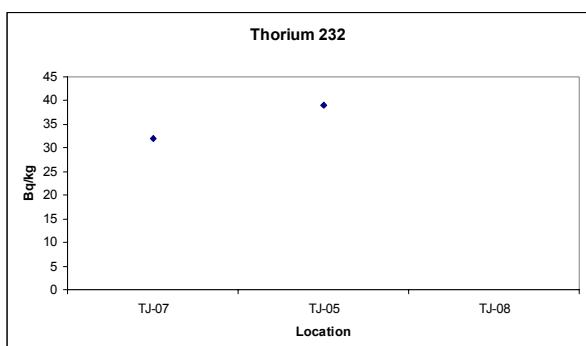
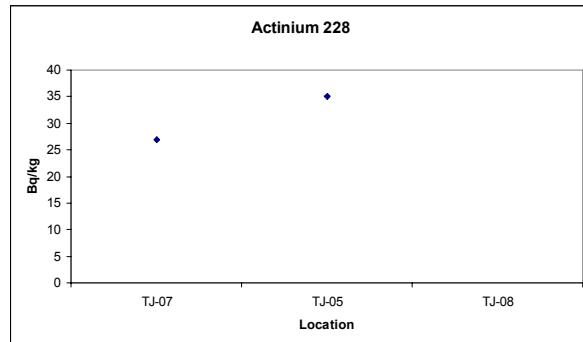
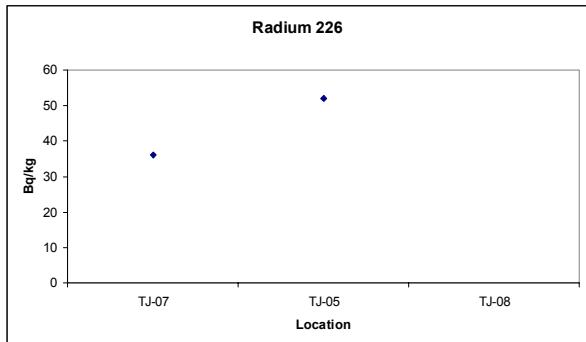
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South Tajikistan, Soils Radionuclides Data, Spring 2001



Provisional Data

South Tajikistan, Soils Radionuclides Data, Spring 2001, continued



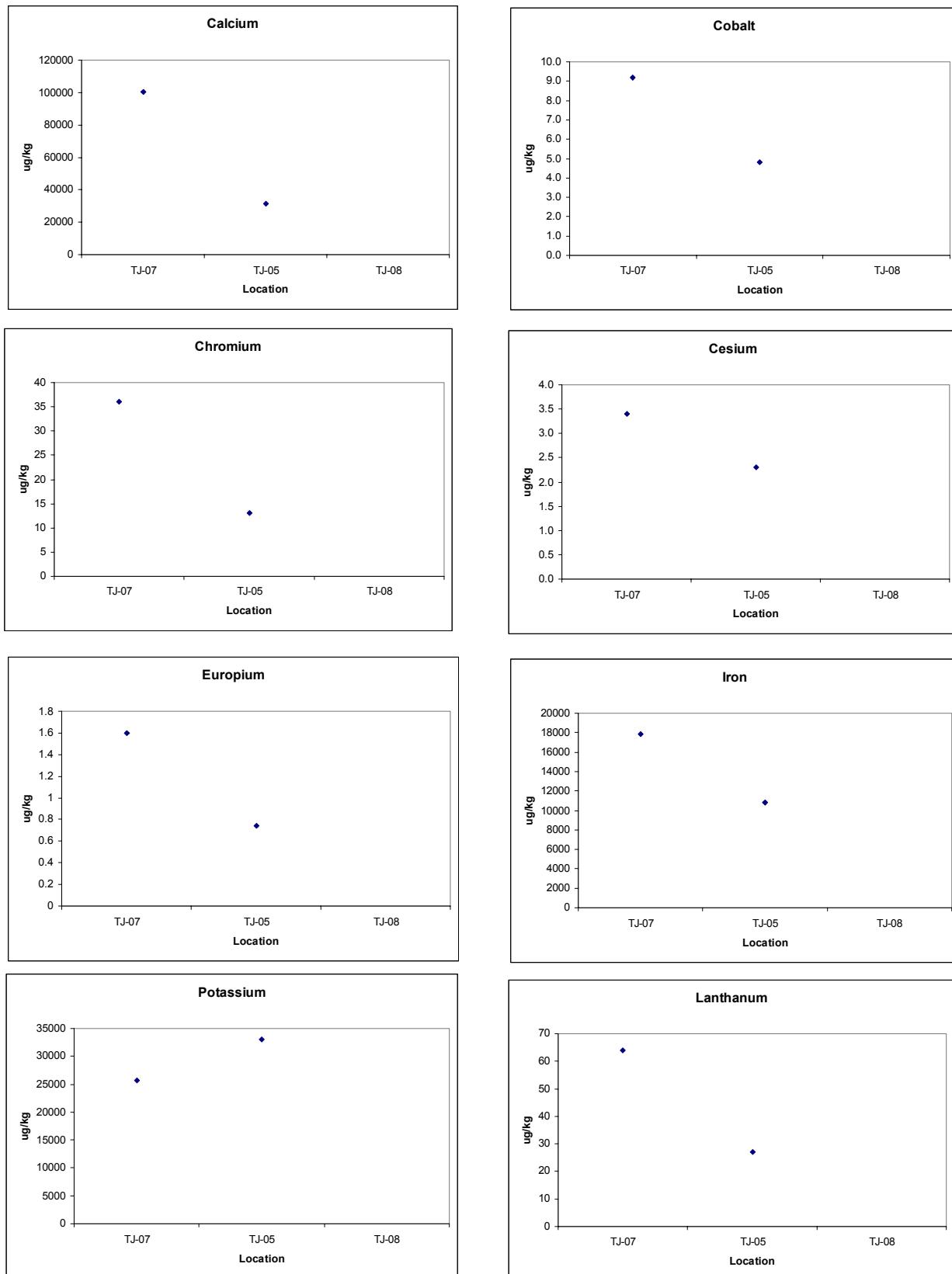
Provisional Data

South Tajikistan, Dissolved Metals Data, Spring 2001

No data available

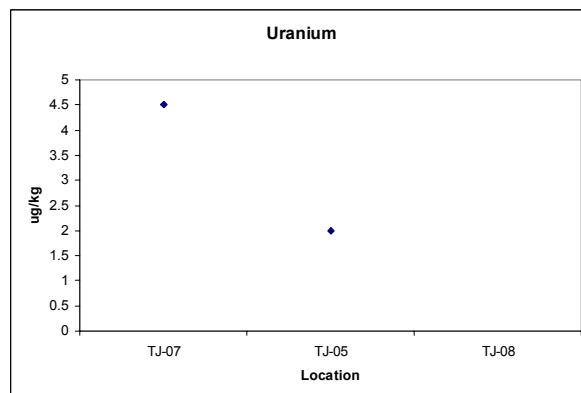
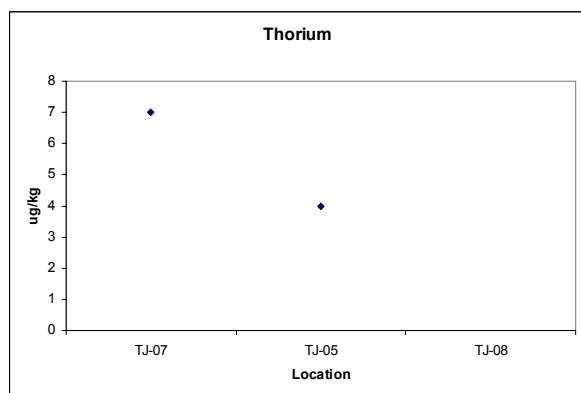
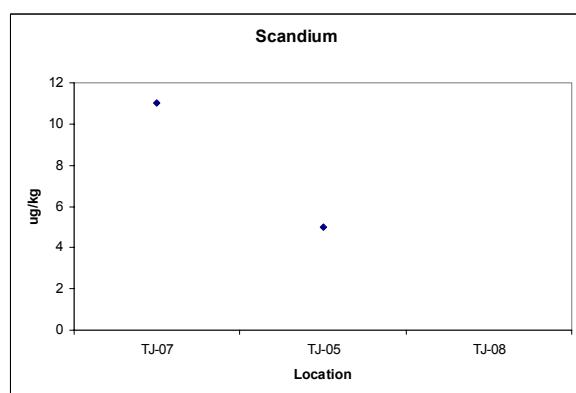
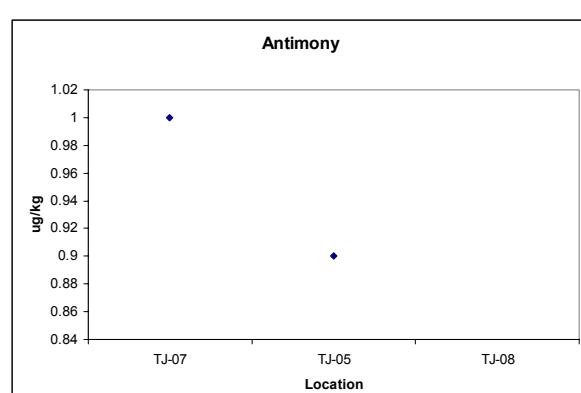
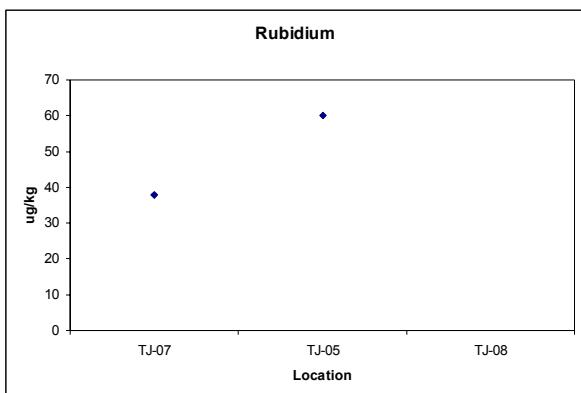
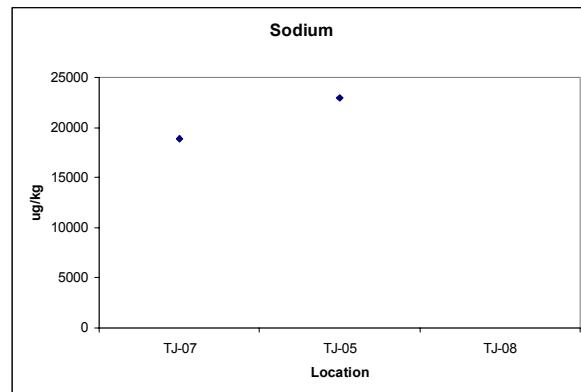
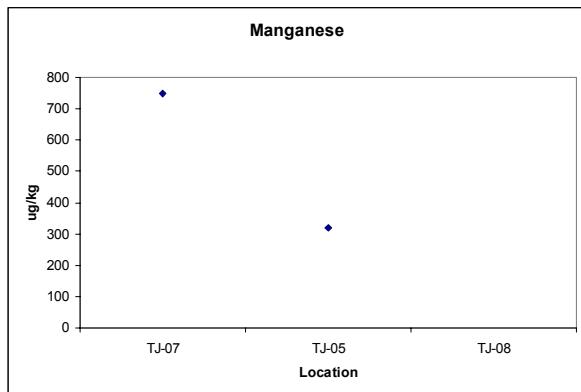
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South Tajikistan, Bottom Sediments Metals Data, Spring 2001



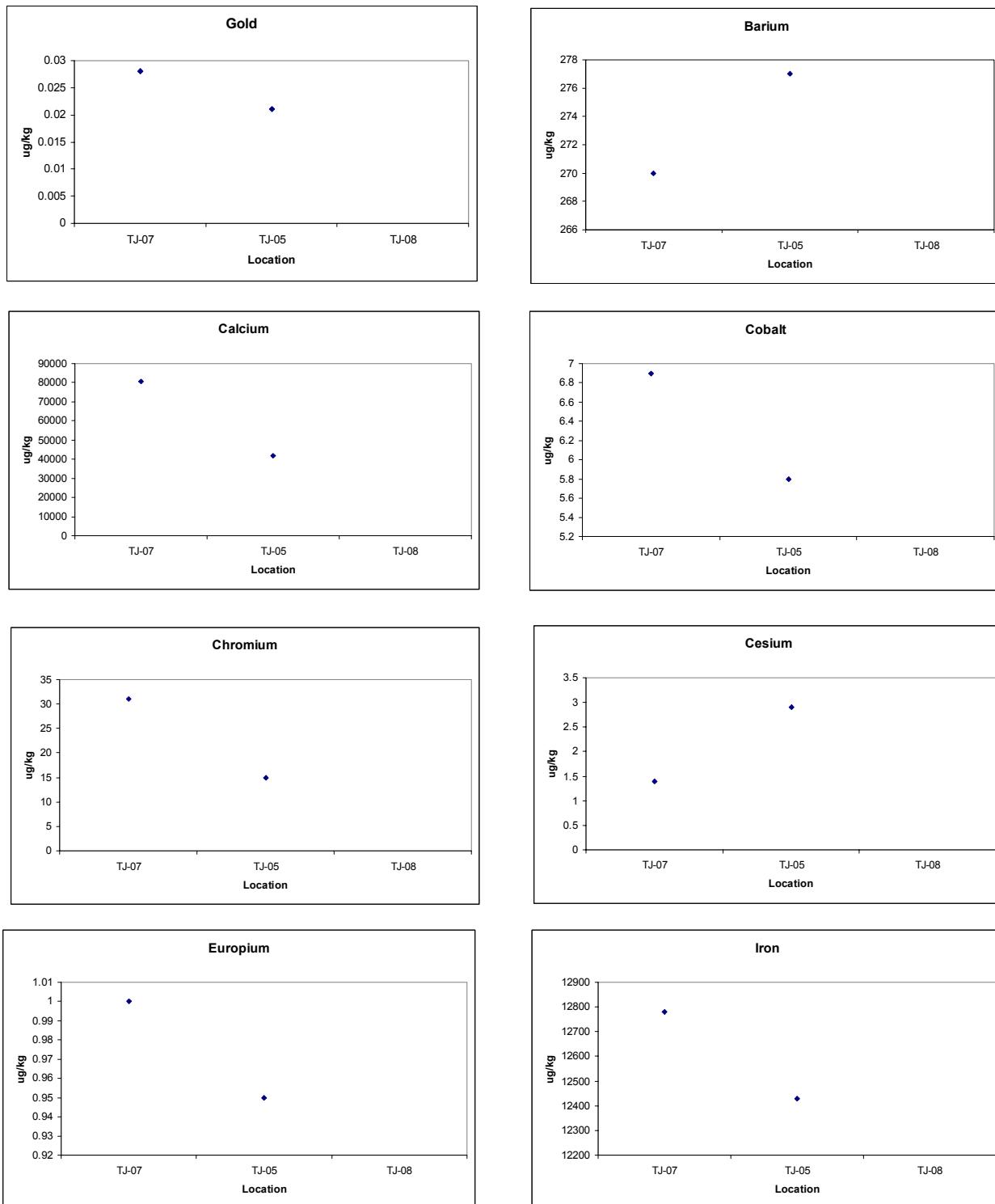
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South Tajikistan, Bottom Sediments Metals Data, Spring 2001, continued



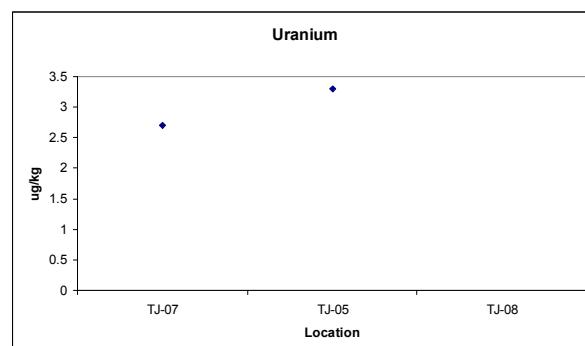
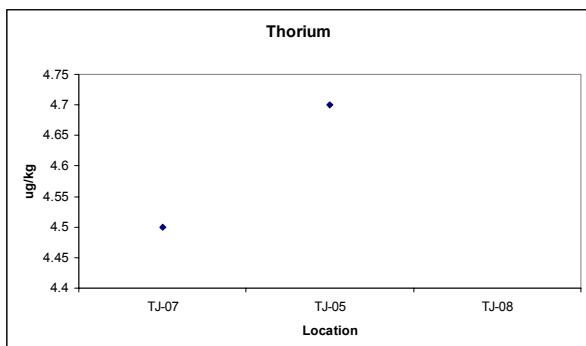
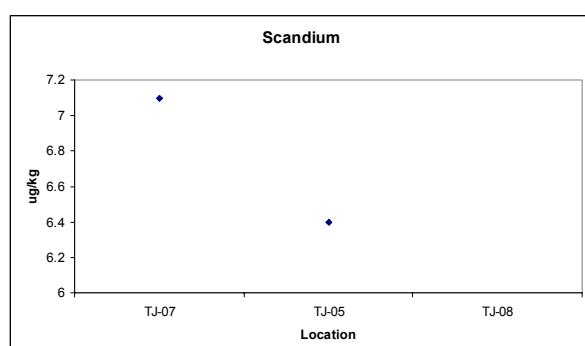
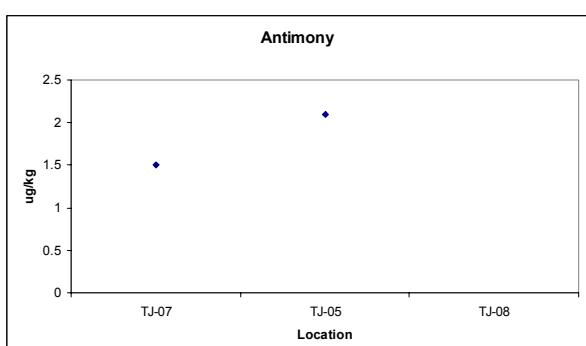
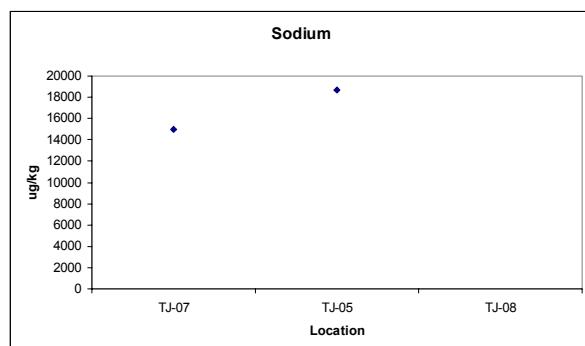
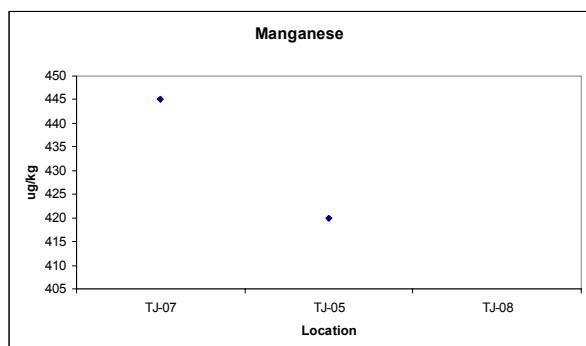
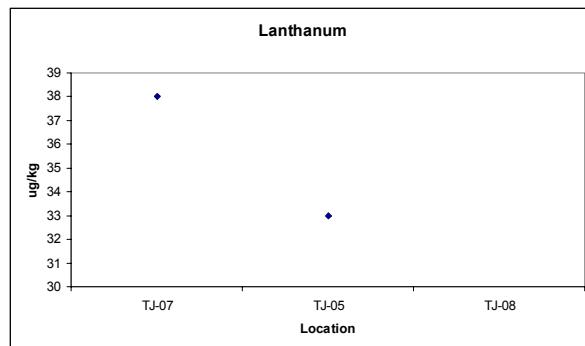
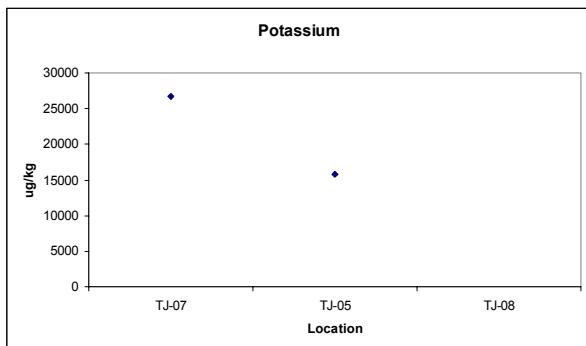
Provisional Data

South Tajikistan, Soils Metals Data, Spring 2001



Provisional Data

South Tajikistan, Soils Metals Data, Spring 2001, continued



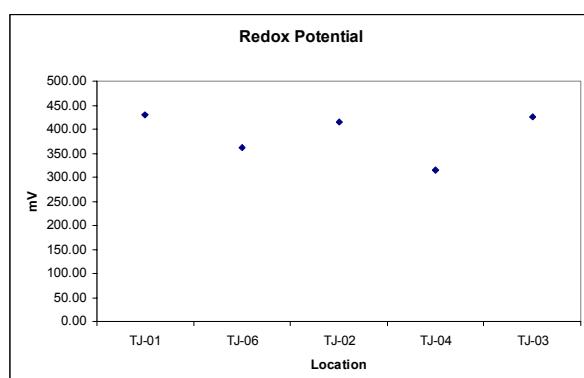
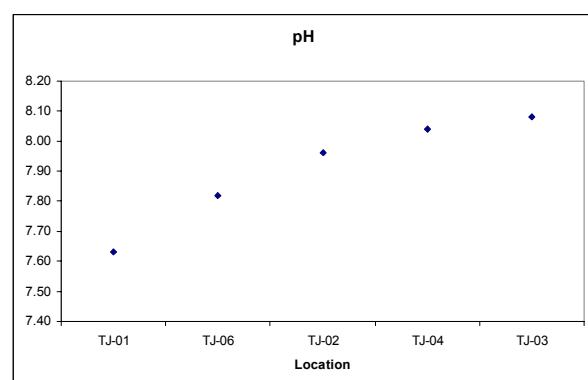
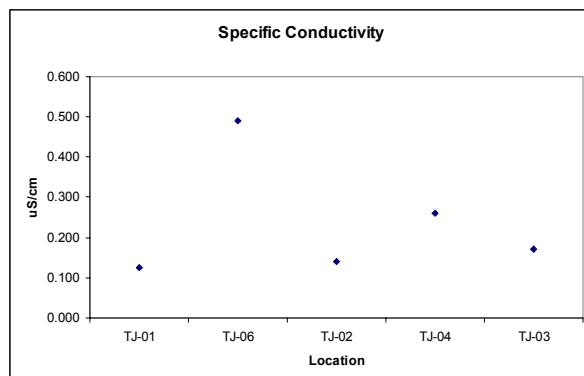
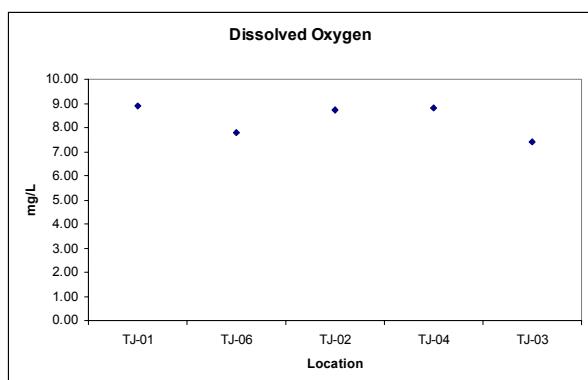
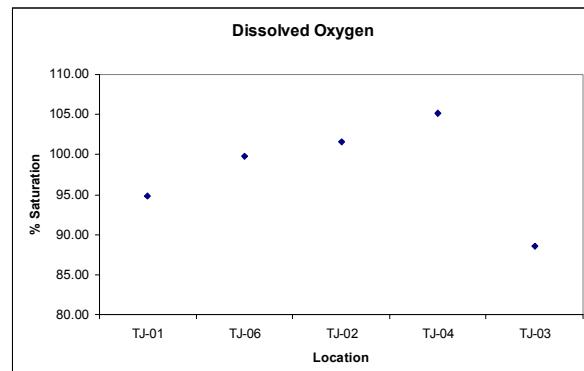
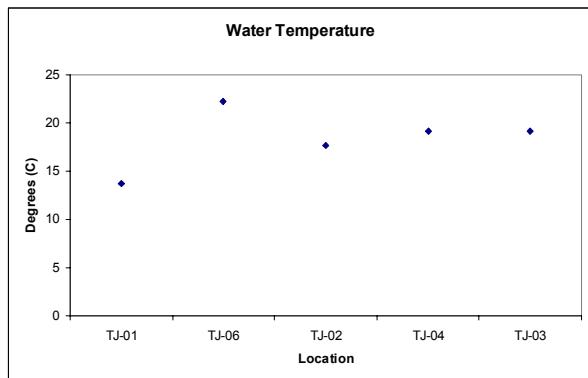
Provisional Data

South Tajikistan, Vegetation Metals Data, Spring 2001

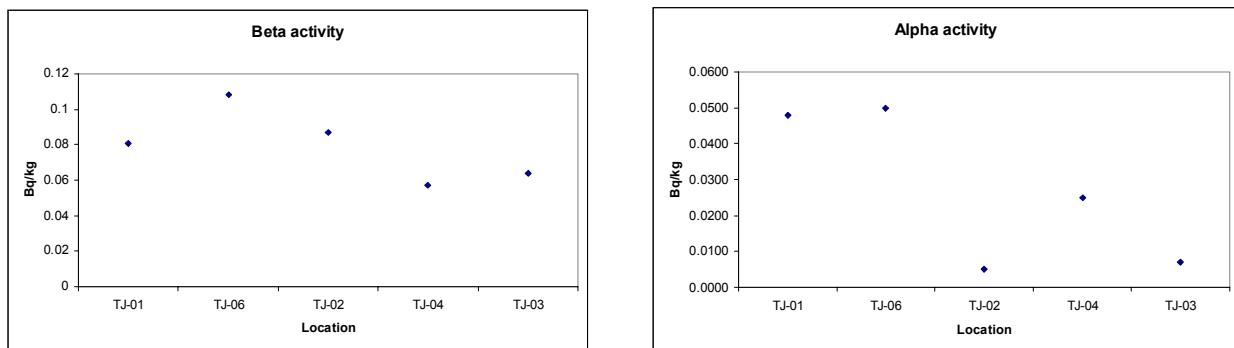
Insufficient data available

Provisional Data

Dushanbe, Basic Water Quality, Spring 2001

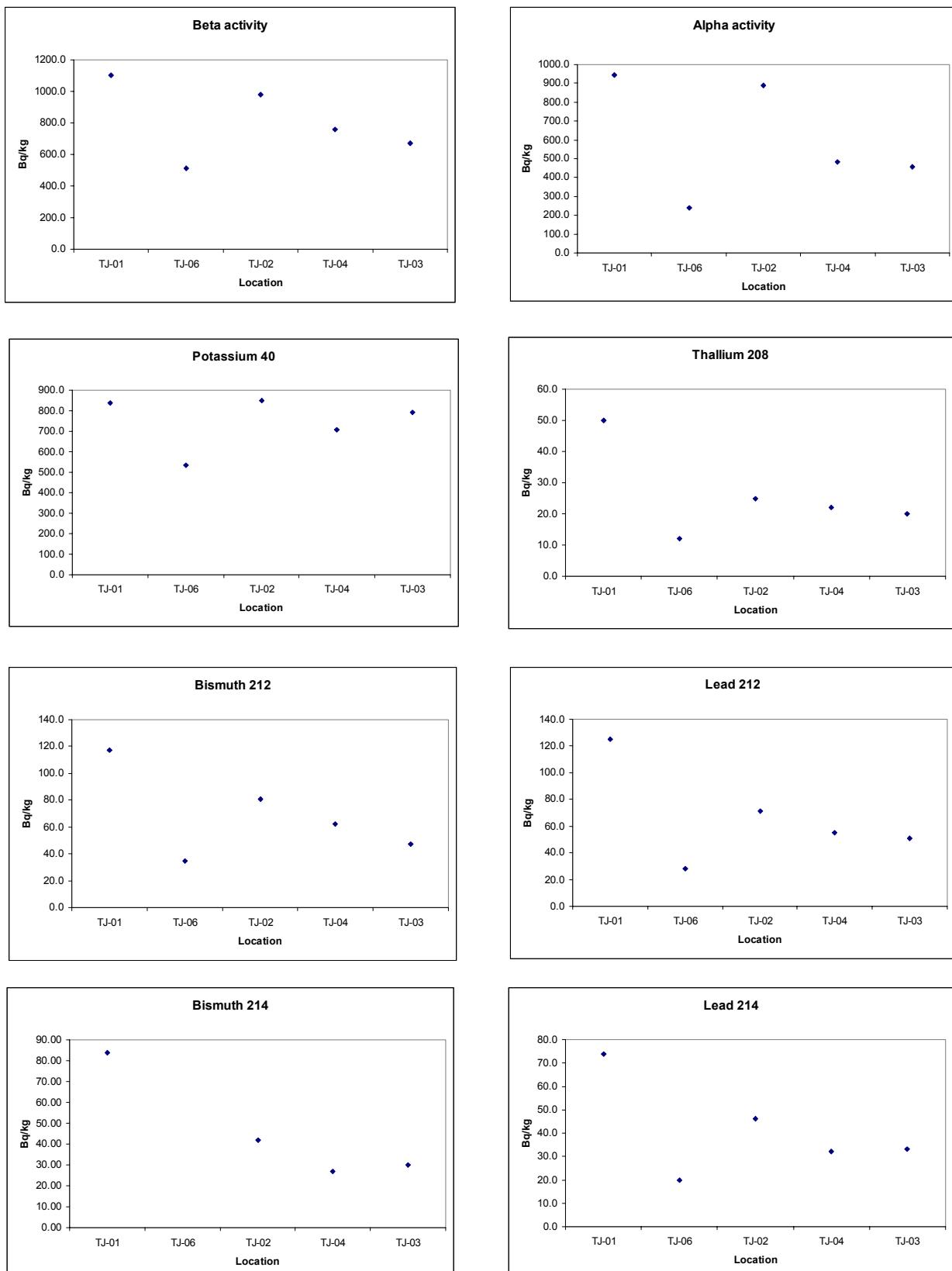


Dushanbe, Dissolved Radionuclides Data, Spring 2001

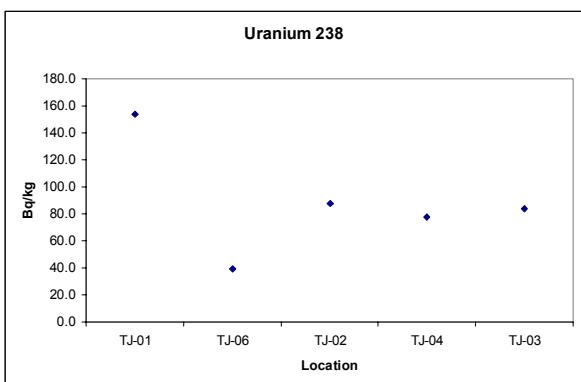
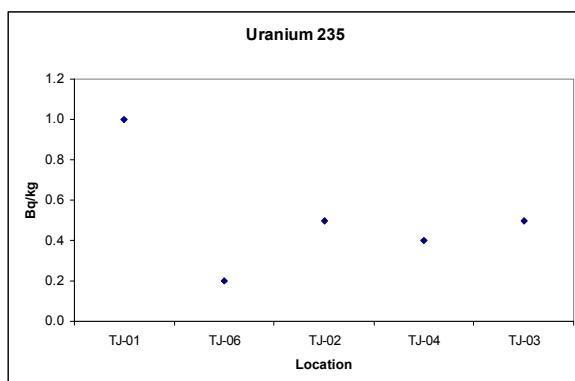
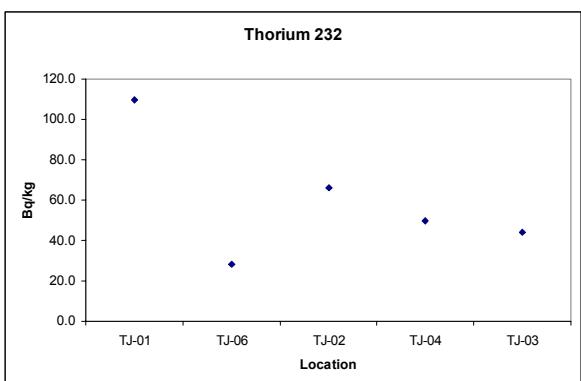
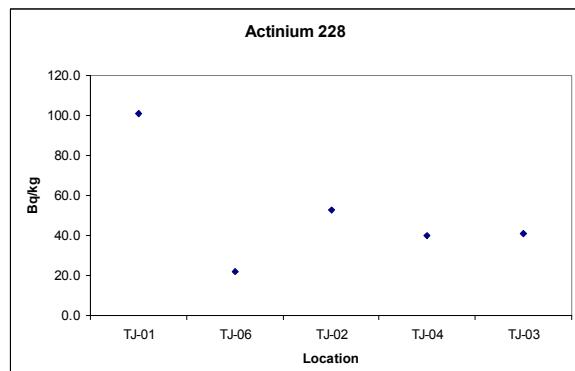
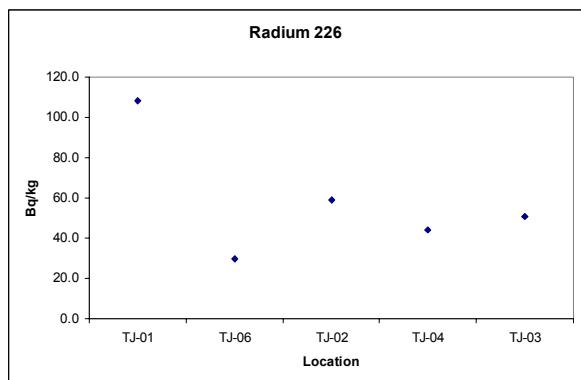


Provisional Data

Dushanbe, Bottom Sediments Radionuclides Data, Fall 2000

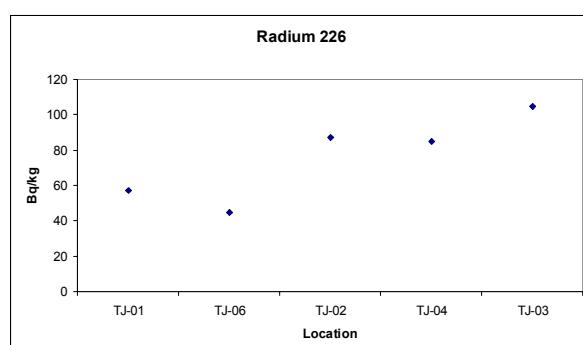
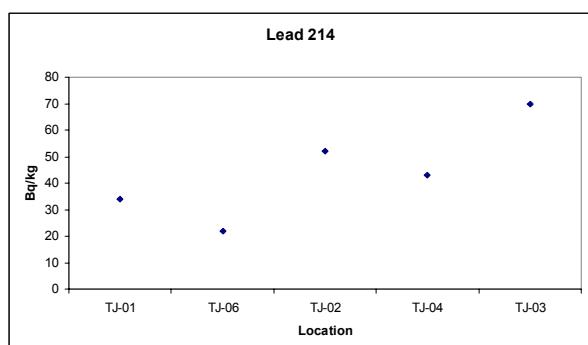
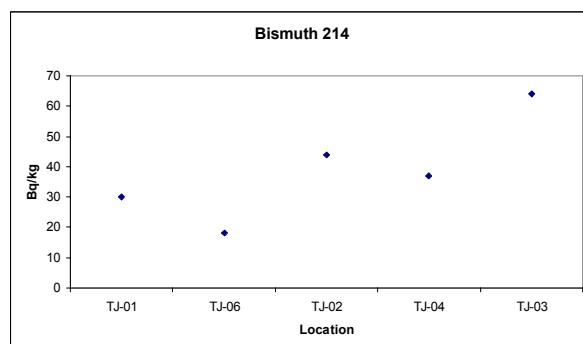
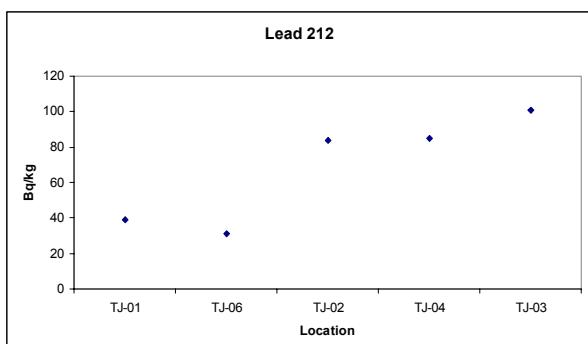
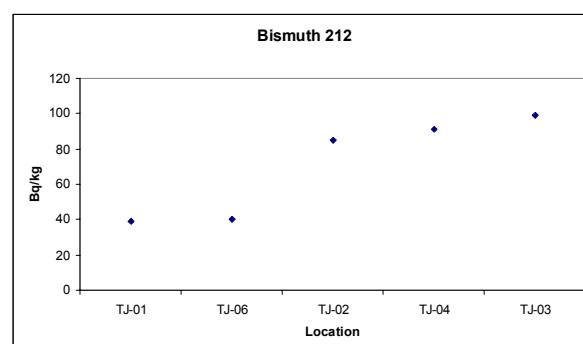
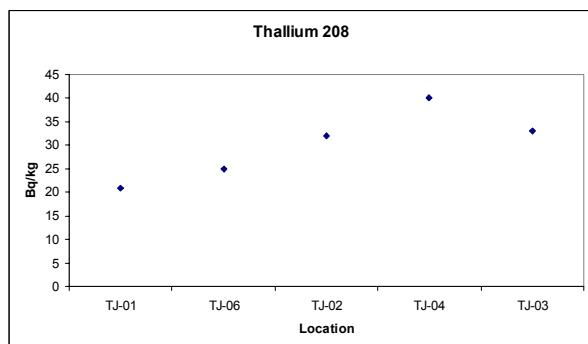
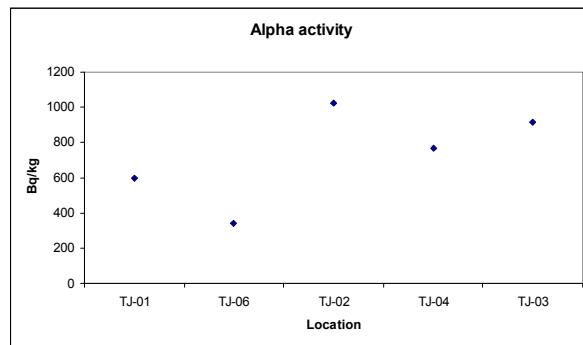
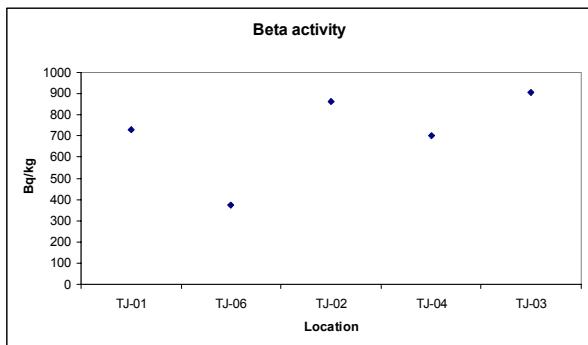


Dushanbe, Bottom Sediments Radionuclides Data, Spring 2001, continued

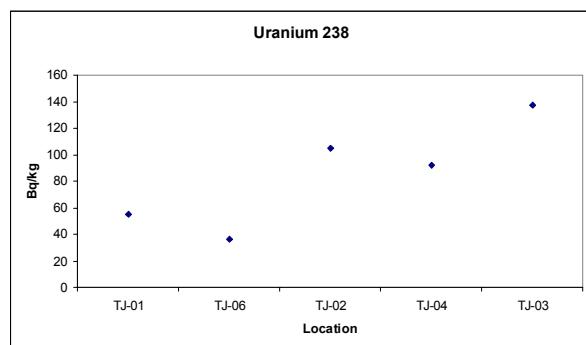
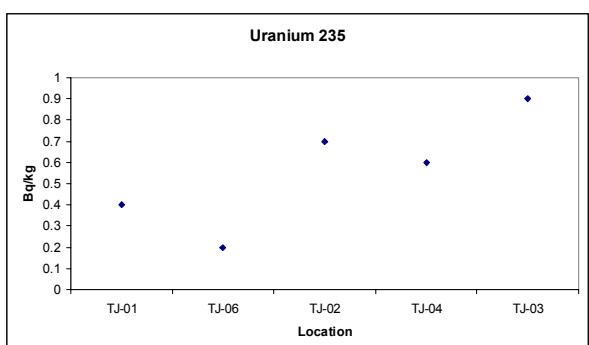
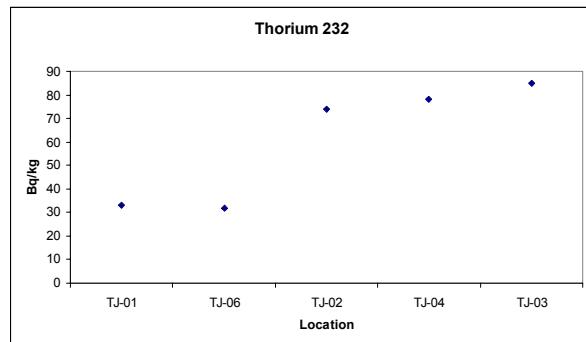
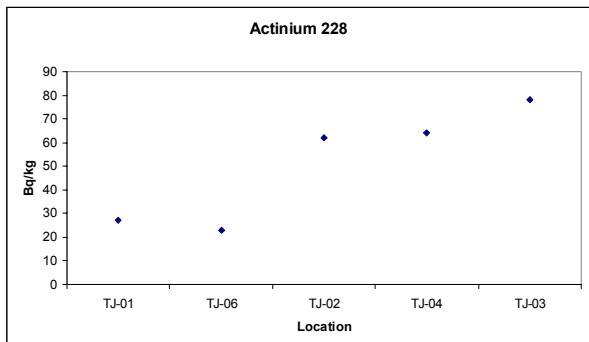


Provisional Data

Dushanbe, Soils Radionuclides Data, Spring 2001

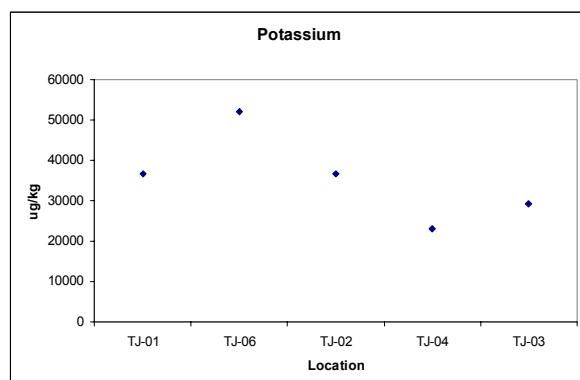
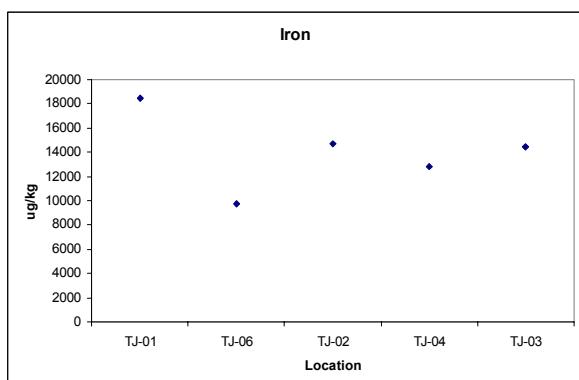
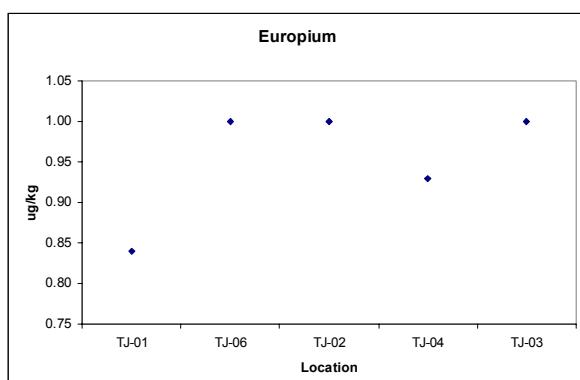
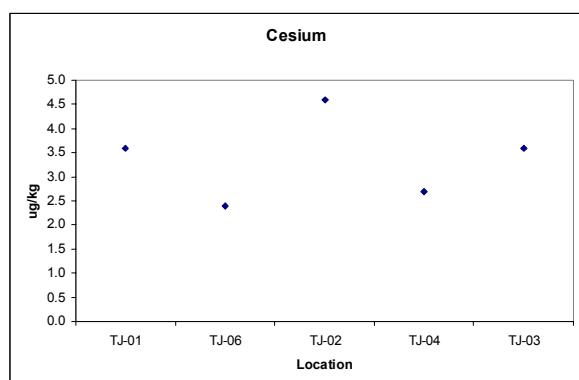
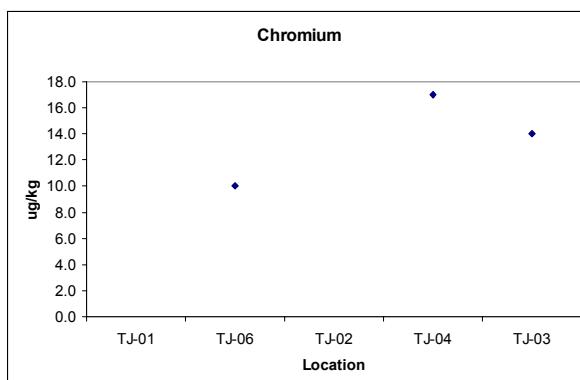
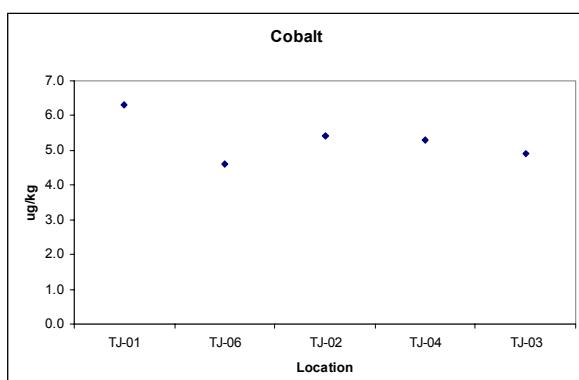
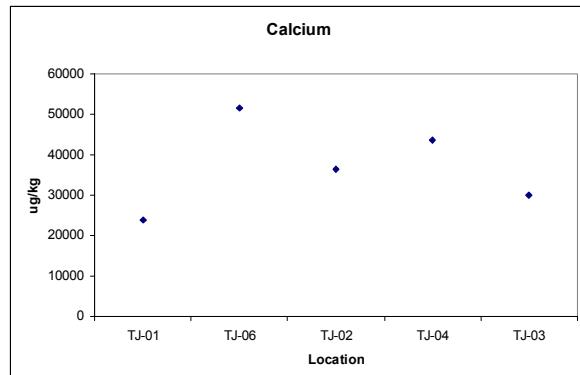
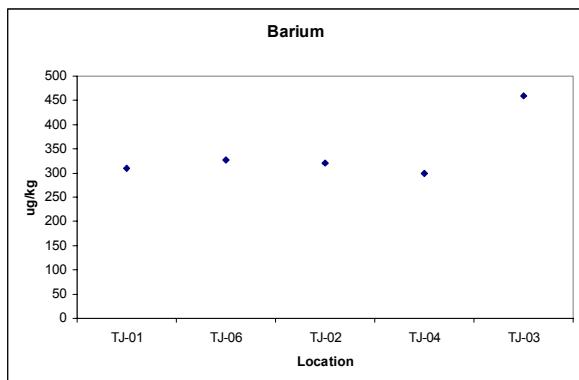


Dushanbe, Soils Radionuclides Data, Spring 2001, continued

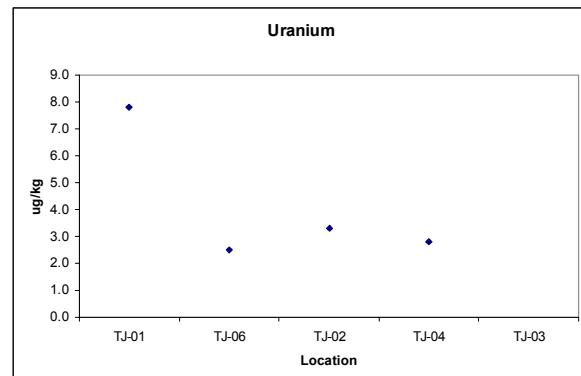
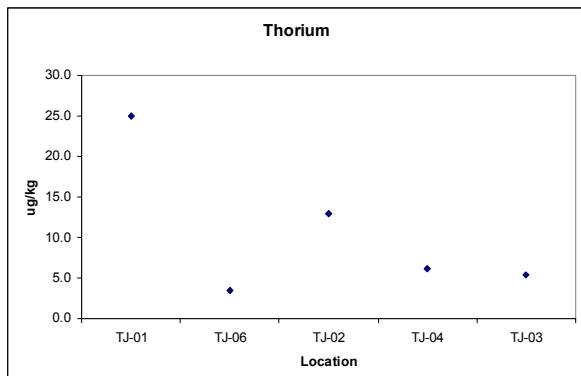
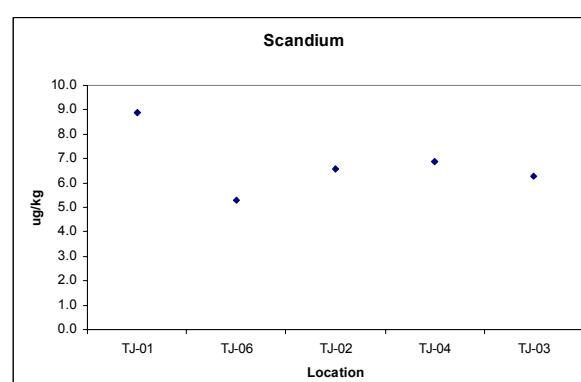
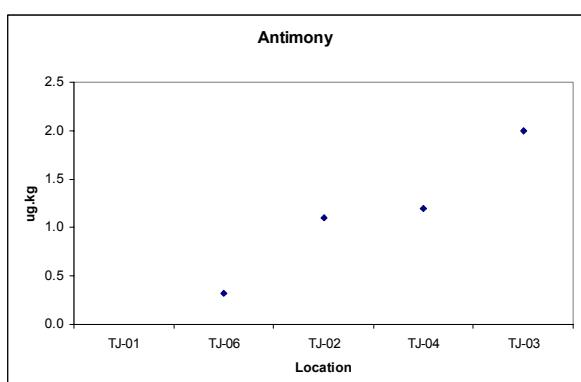
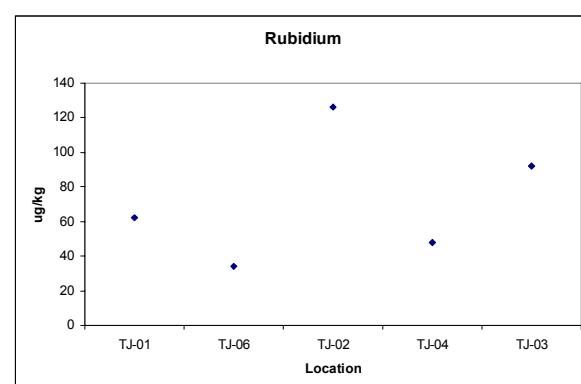
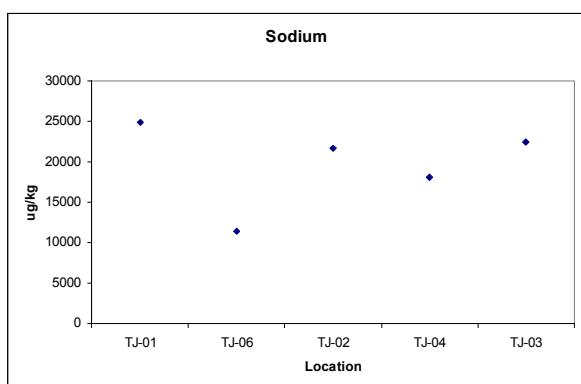
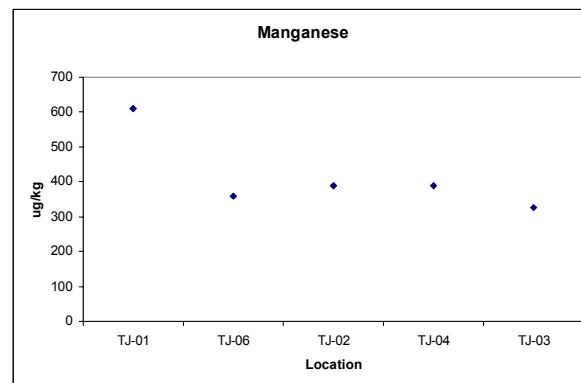
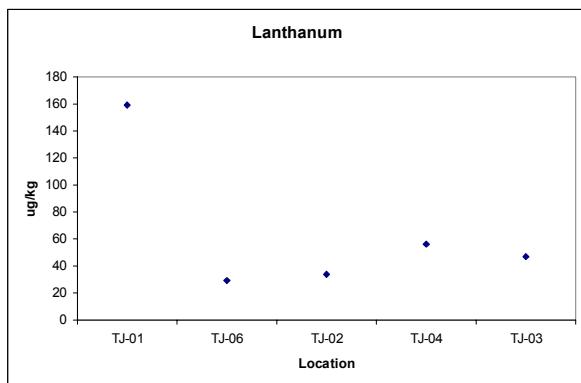


Provisional Data

Dushanbe, Bottom Sediments Metals Data, Spring 2001

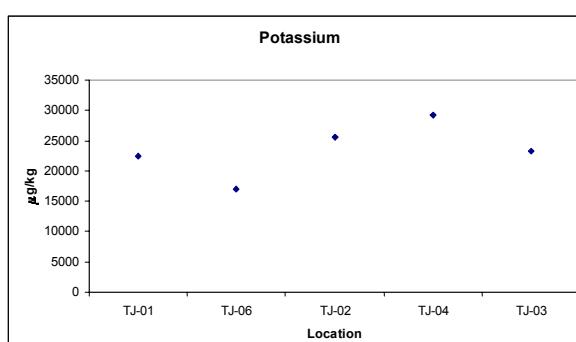
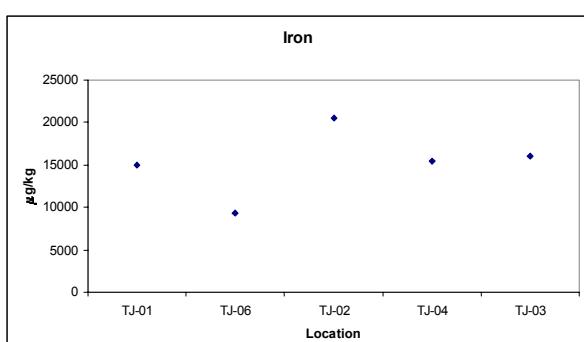
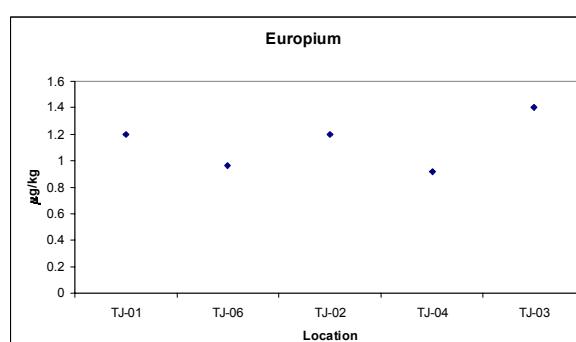
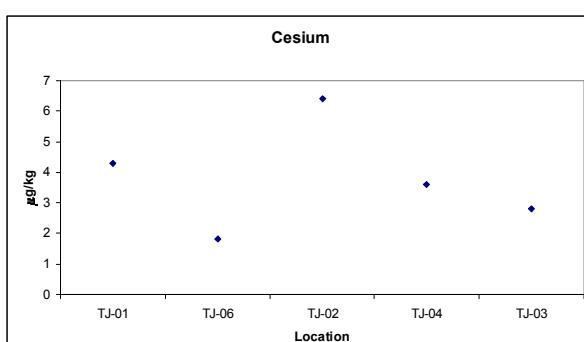
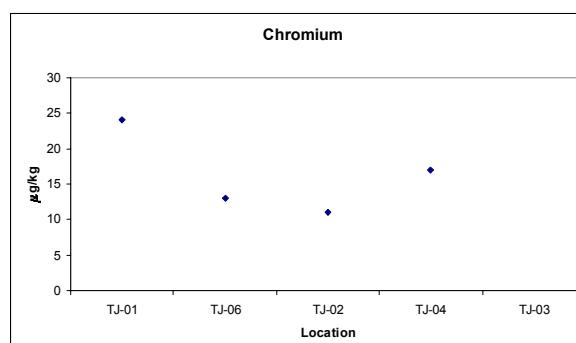
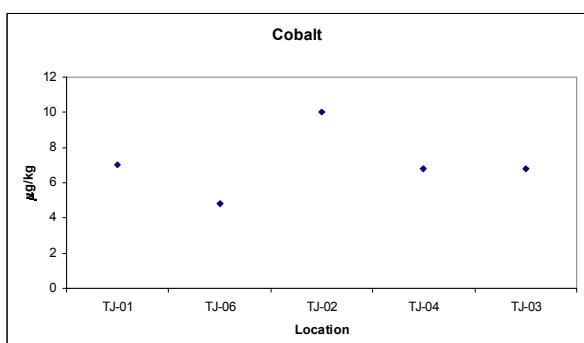
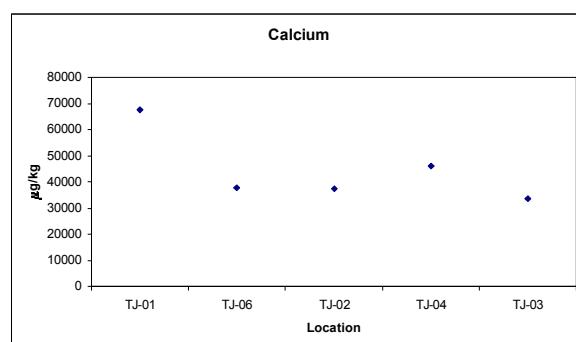
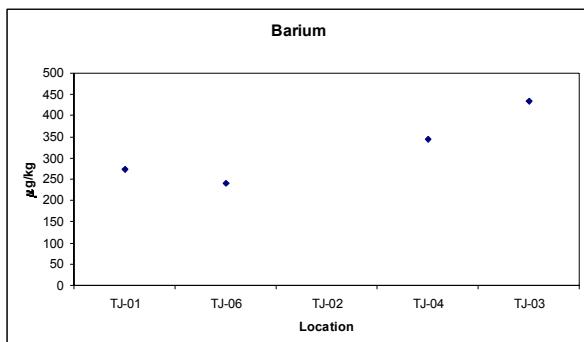


Dushanbe, Bottom Sediments Metals Data, Spring 2001, continued

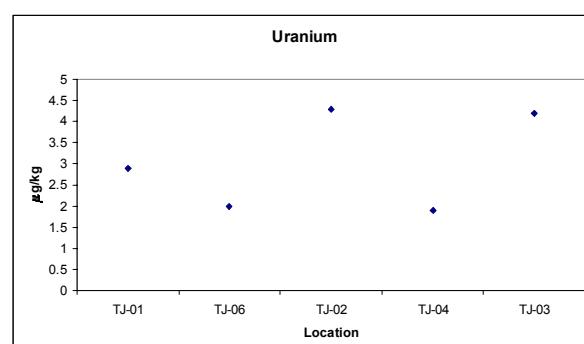
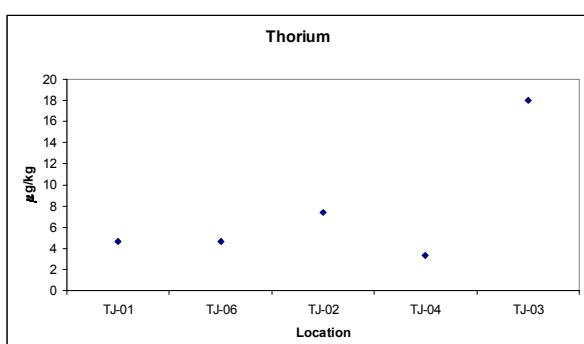
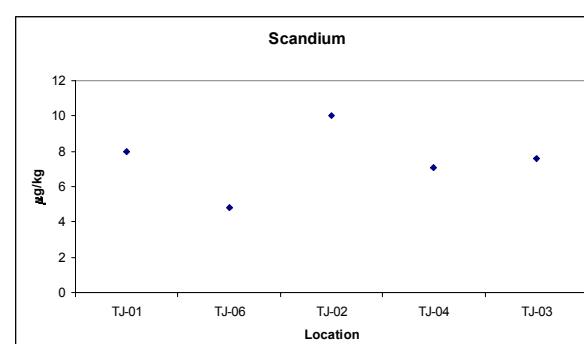
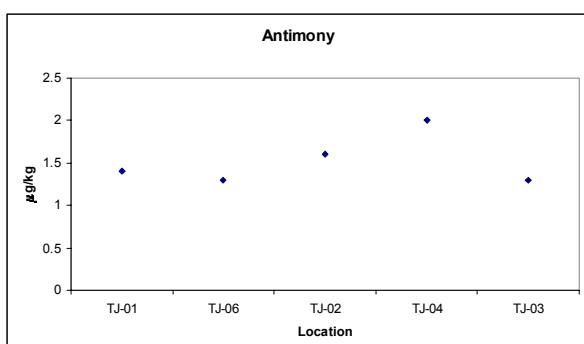
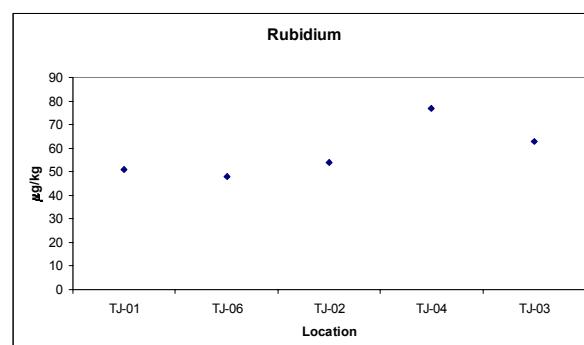
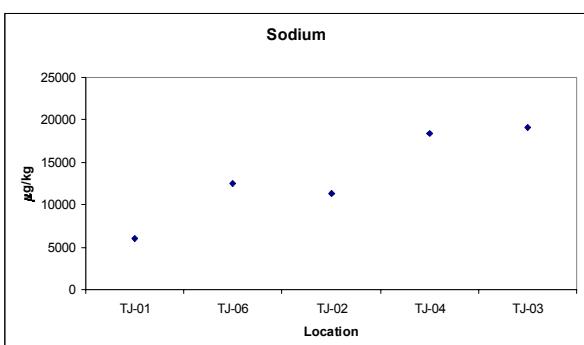
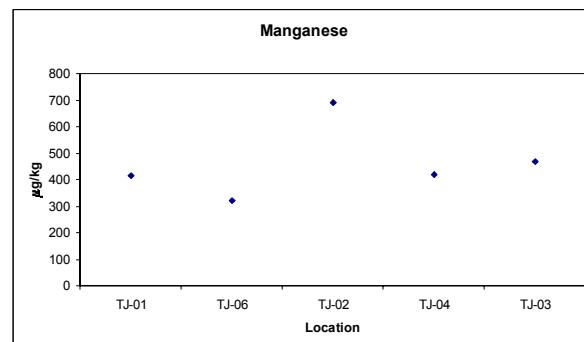
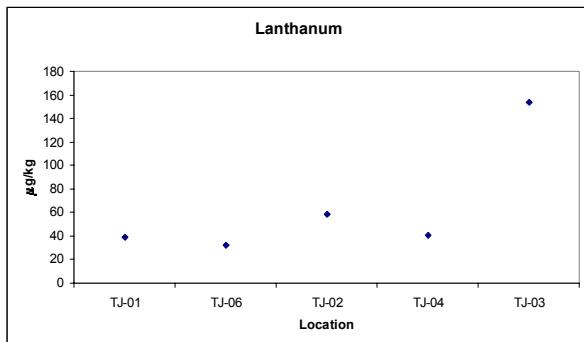


Provisional Data

Dushanbe, Soils Metals Data, Spring 2001

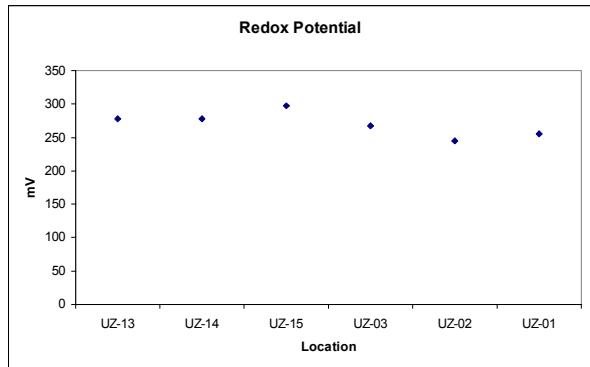
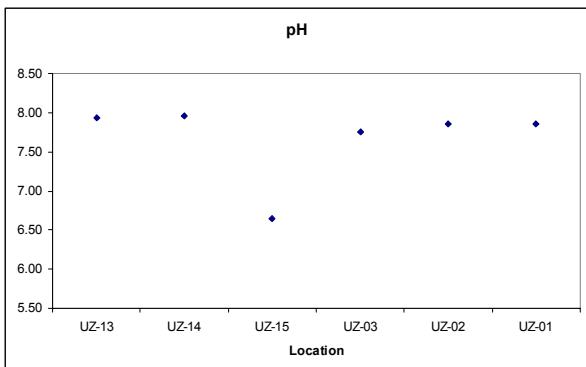
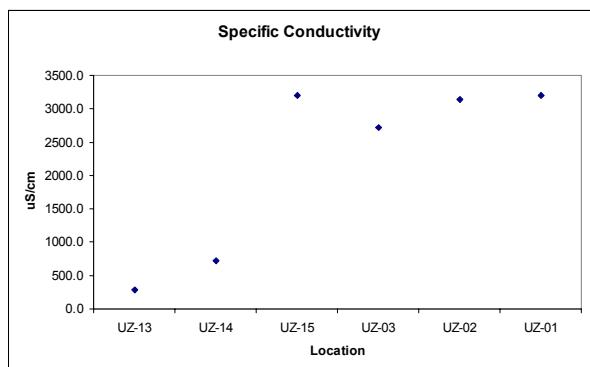
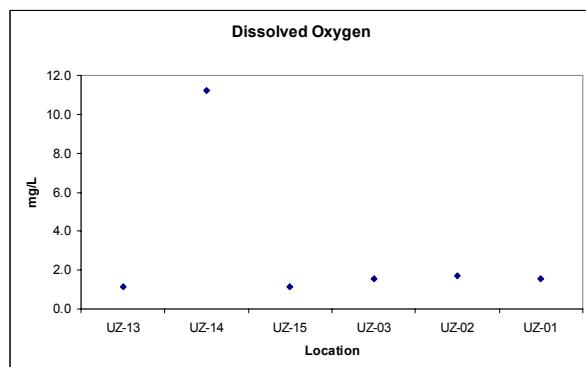
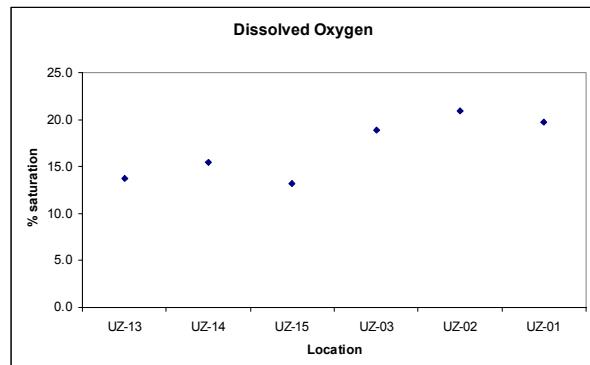
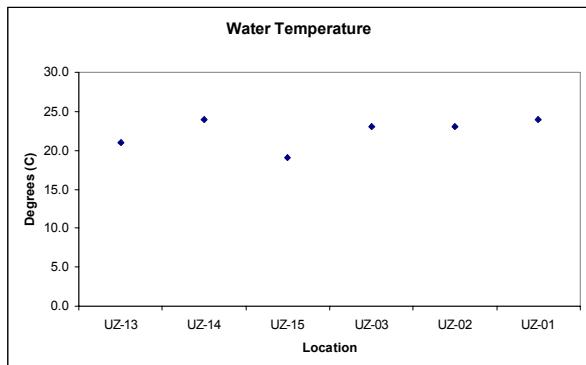


Dushanbe, Soils Metals Data, Spring 2001, continued



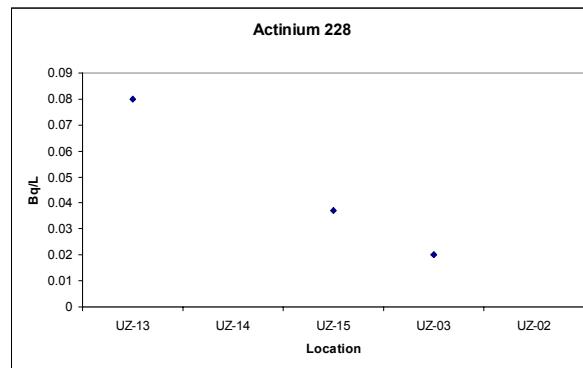
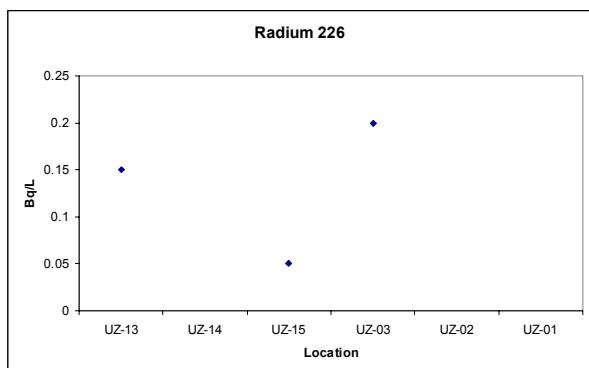
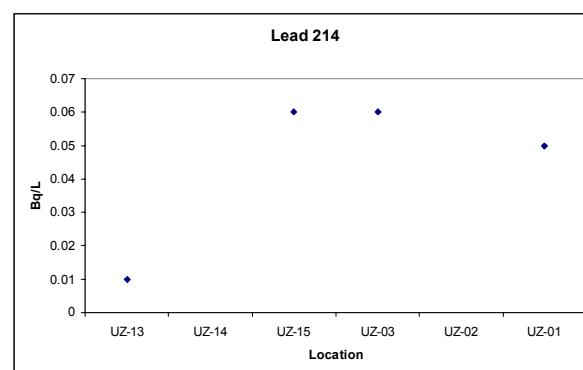
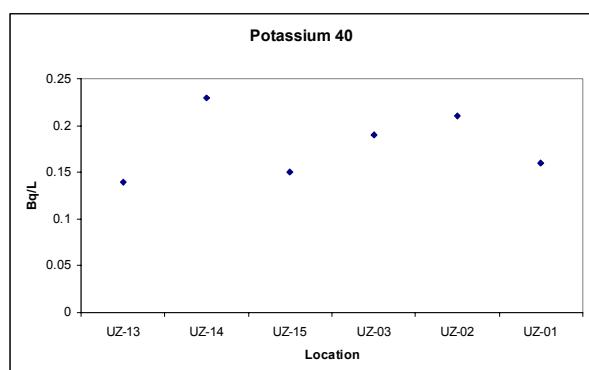
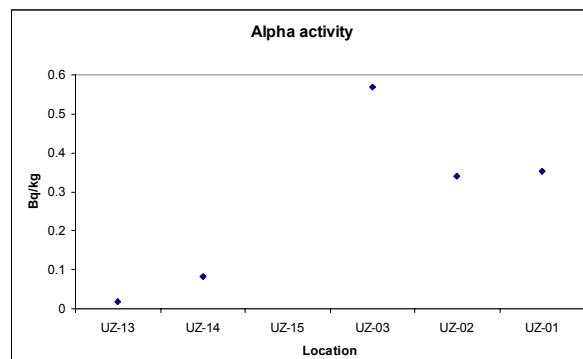
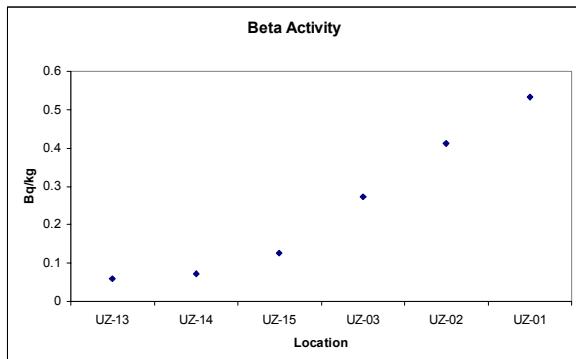
Provisional Data

Zaravshan/Amu Darya Basic Water Quality, Spring 2001



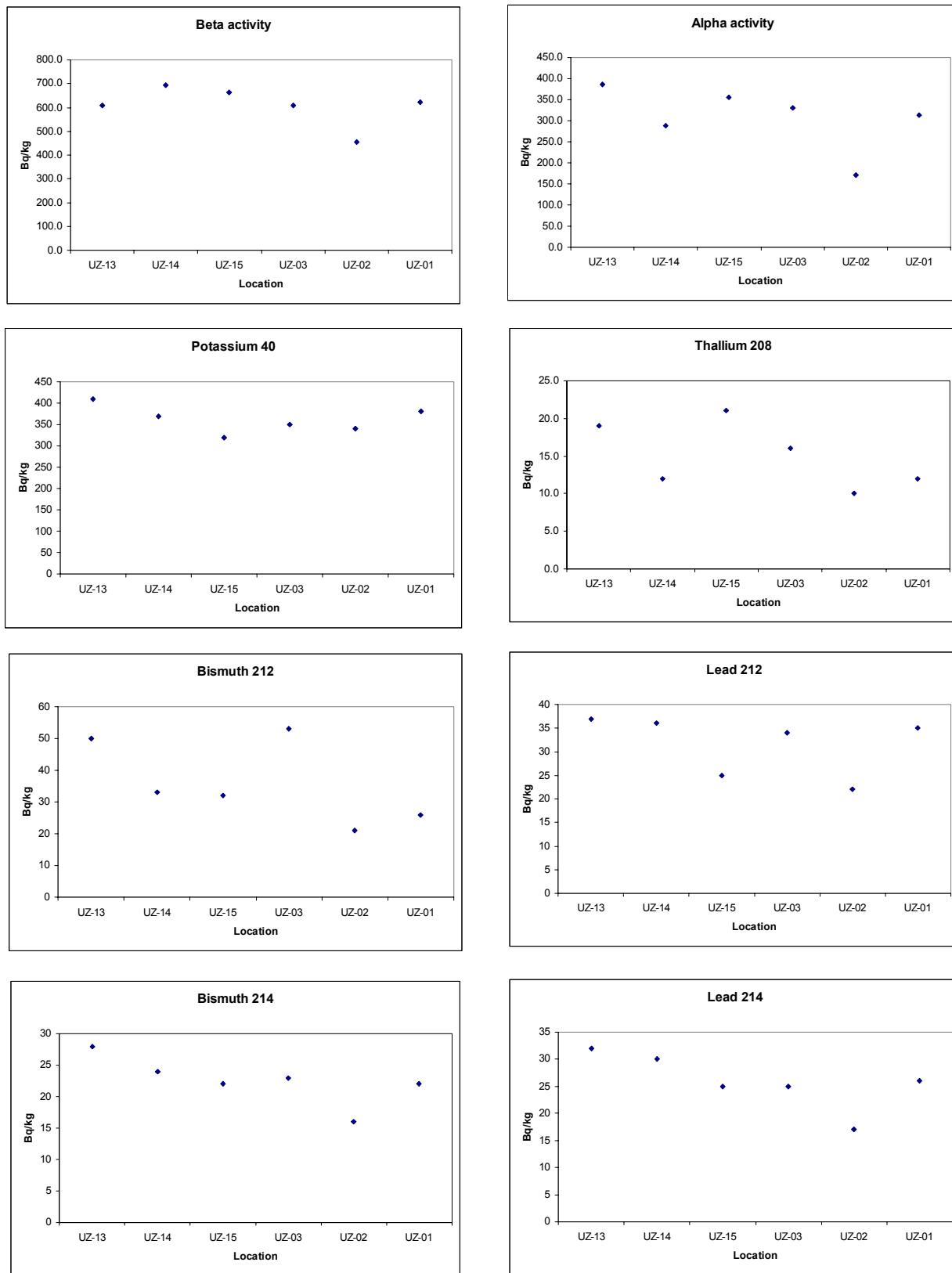
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Zaravshan/Amu Darya Water (Dissolved) Radionuclides Data, Spring 2001



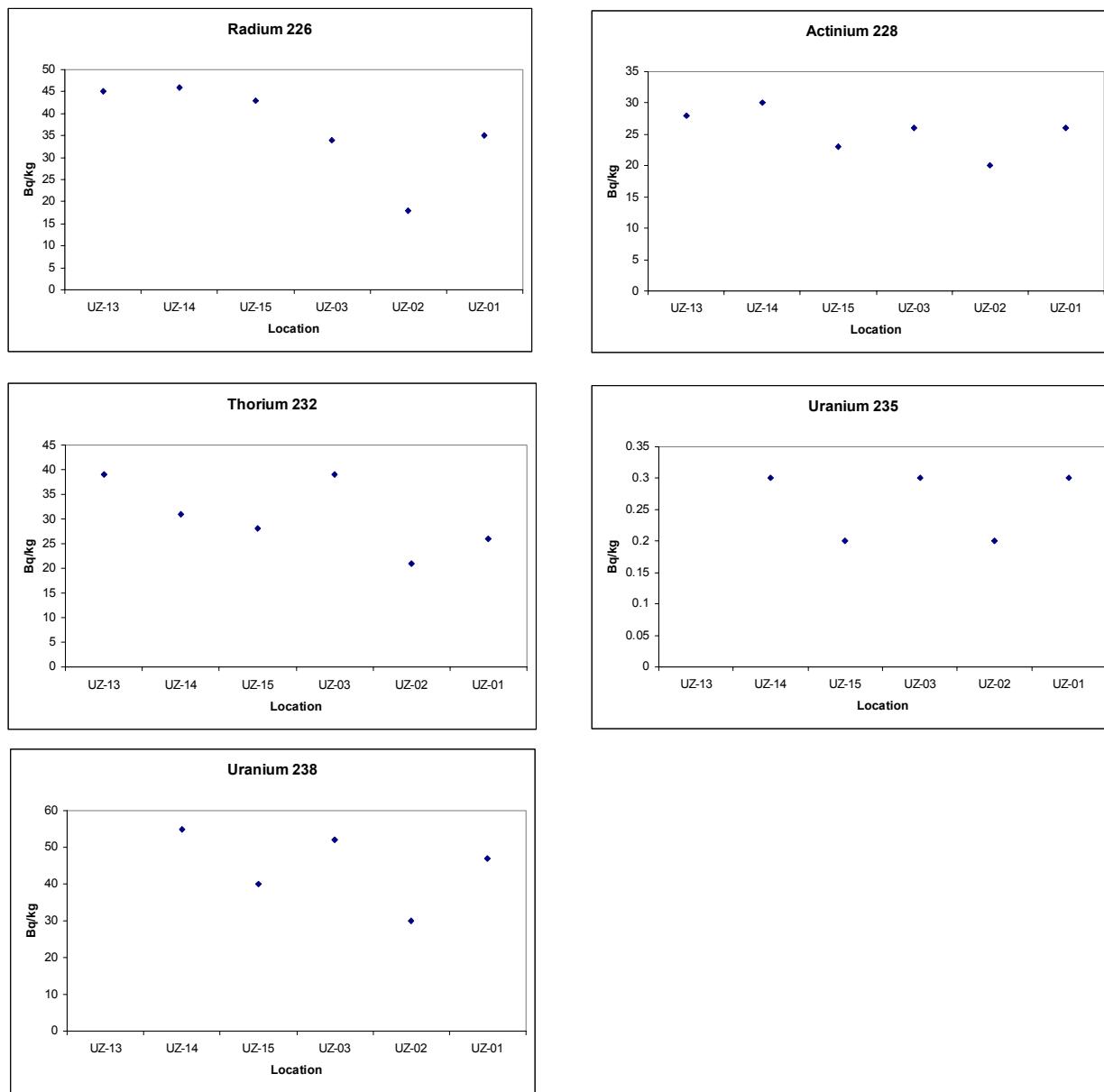
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Zaravshan/Amu Darya Bottom Sediments Radionuclides Data, Spring 2001



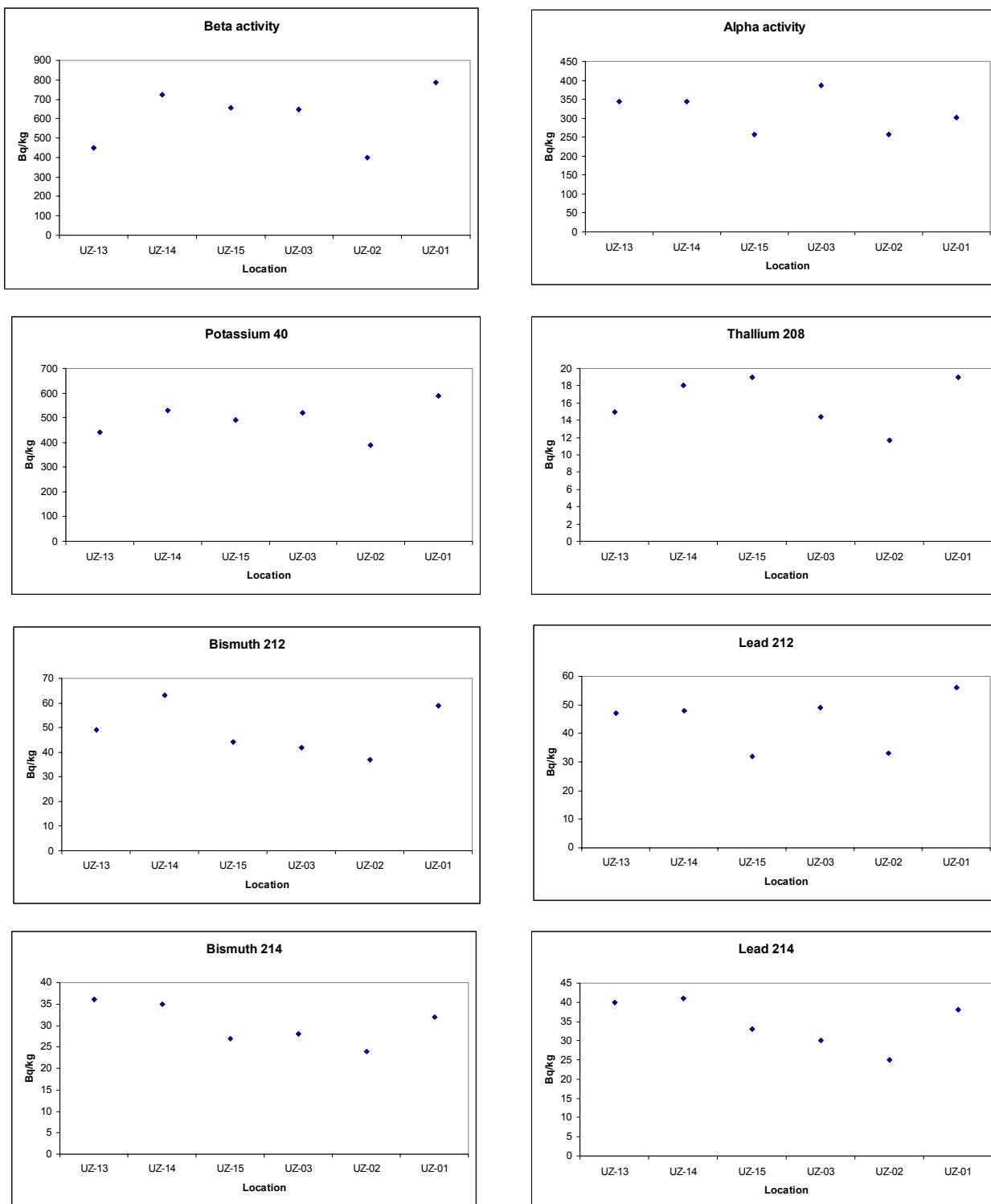
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**Zaravshan/Amu Darya Bottom Sediments Radionuclides Data, Spring 2001,
continued**



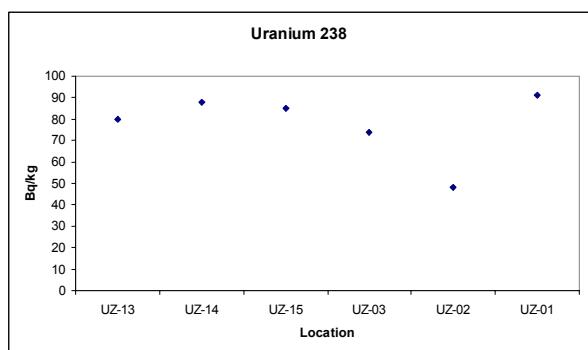
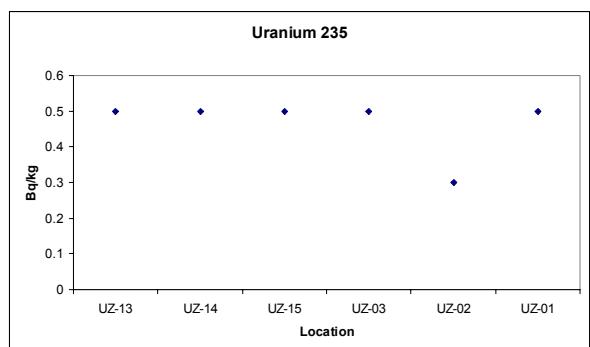
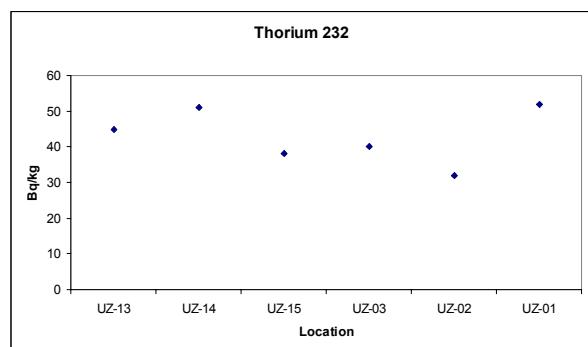
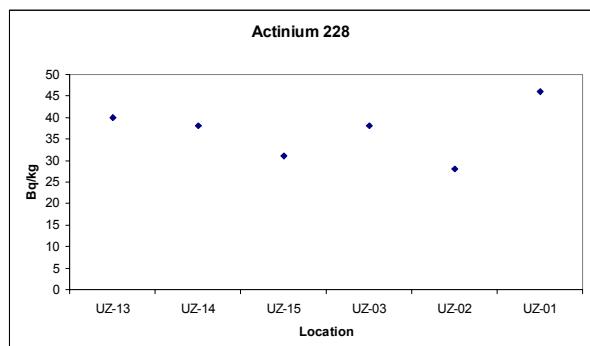
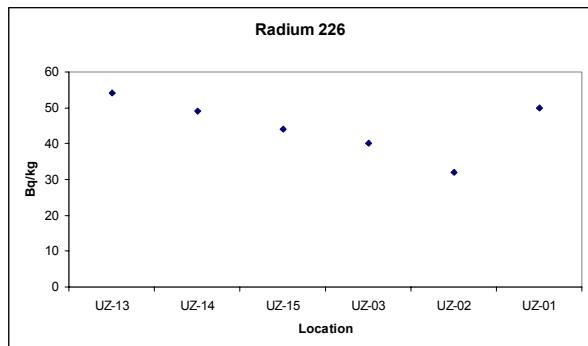
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Zaravshan/Amu Darya Soils Radionuclides Data, Spring 2001



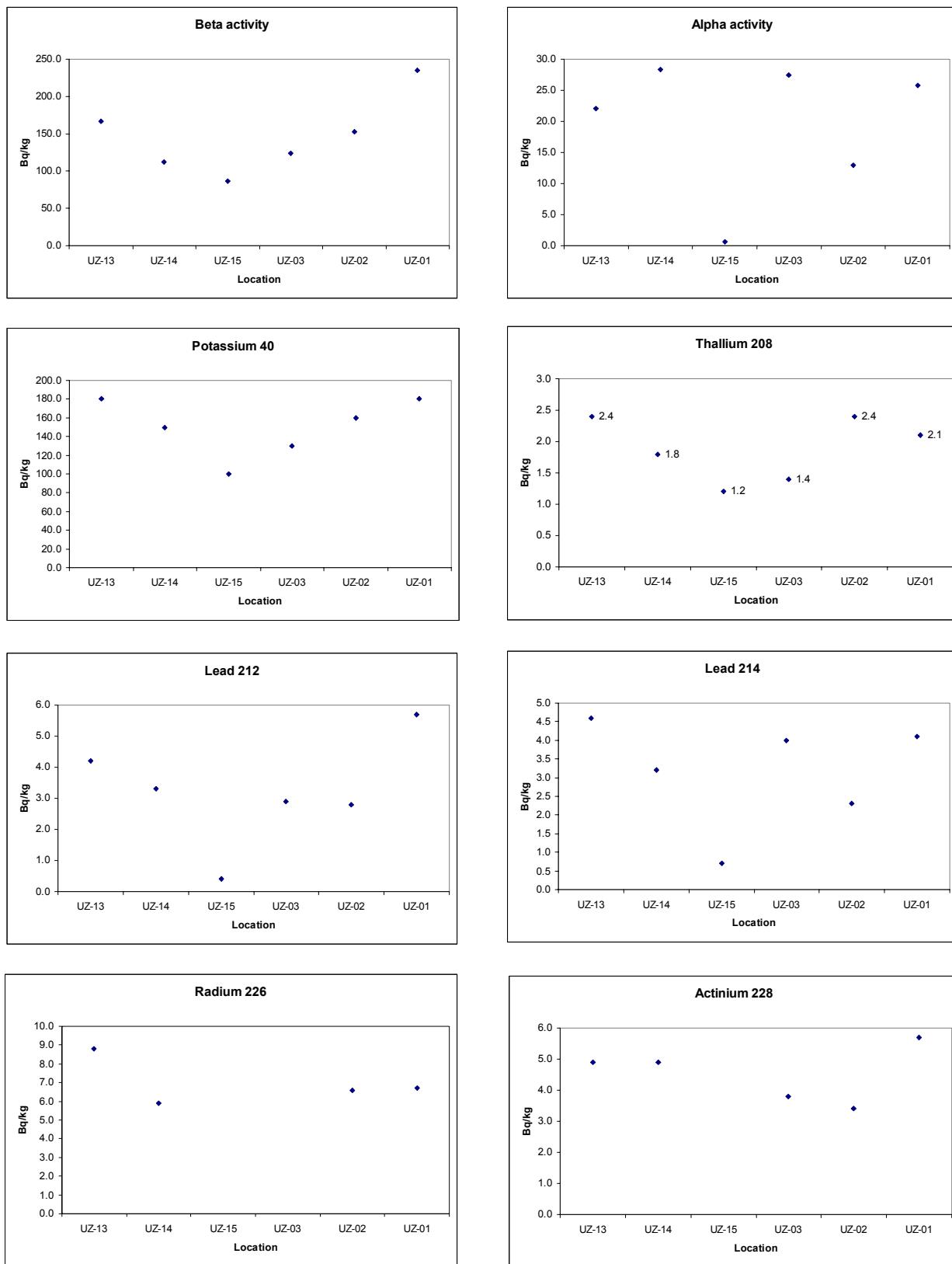
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Zaravshan/Amu Darya Soils Radionuclides Data, Spring 2001, continued



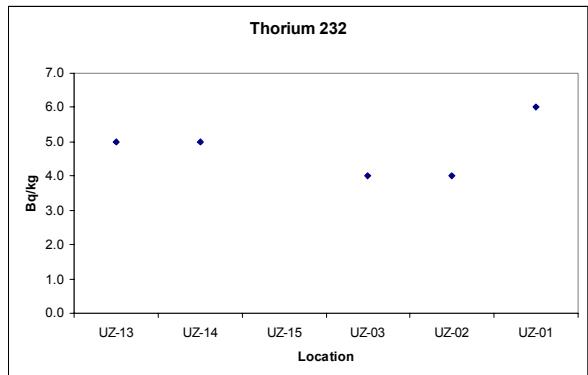
Provisional Data

Zaravshan/Amu Darya Vegetation Radionuclides Data, Spring 2001



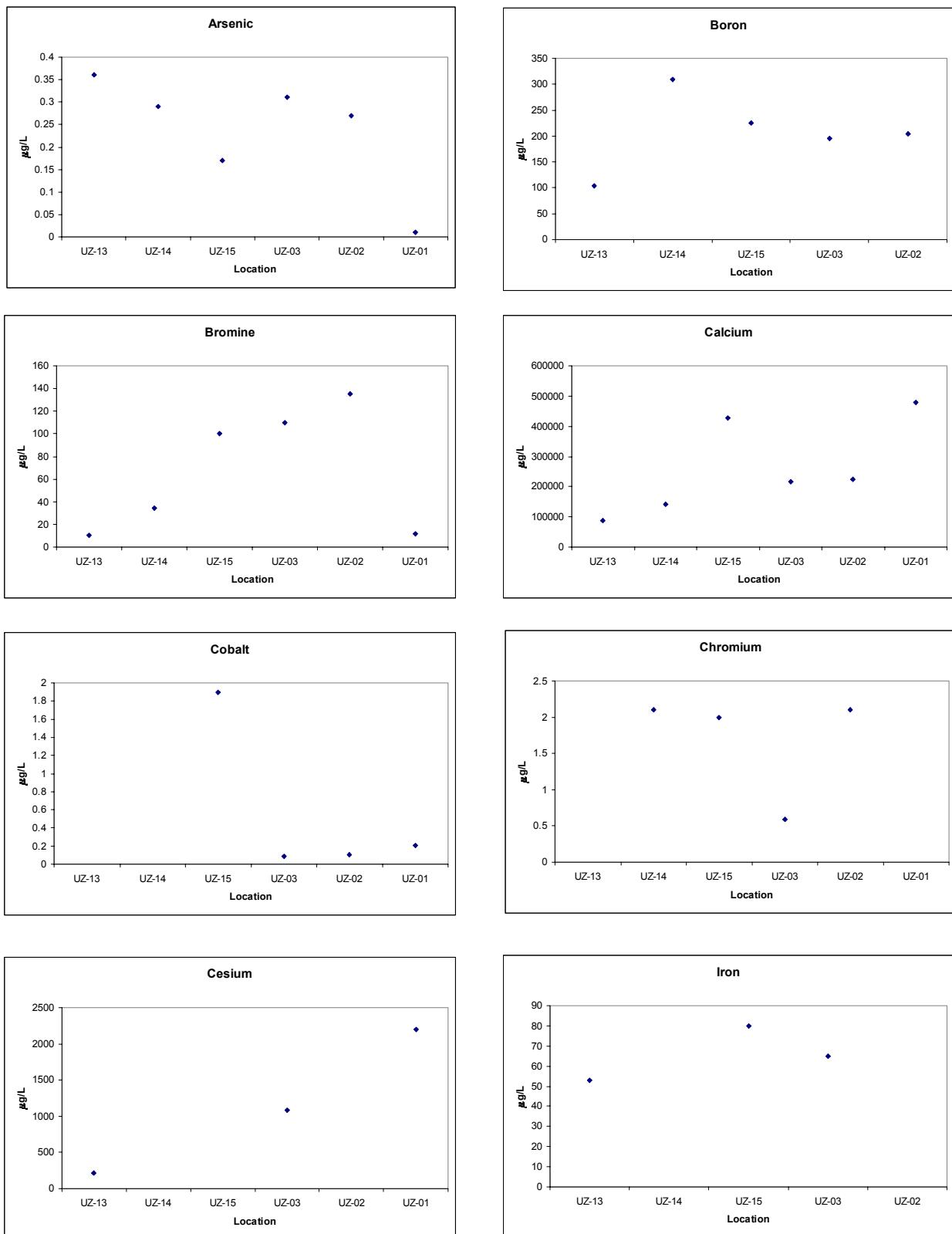
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Zaravshan/Amu Darya Vegetation Radionuclides Data, Spring 2001, continued



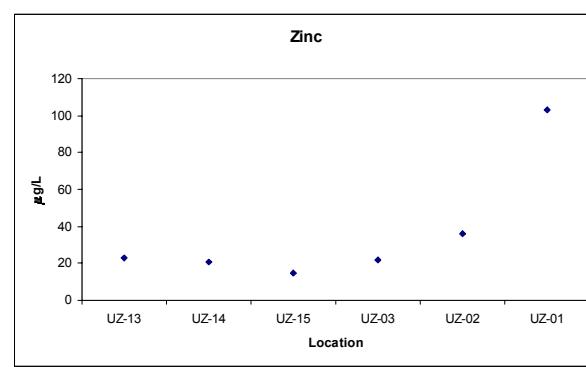
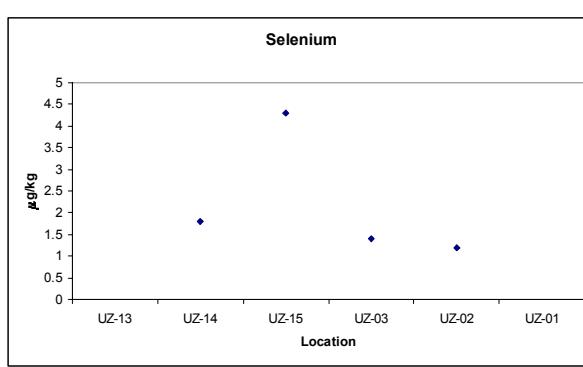
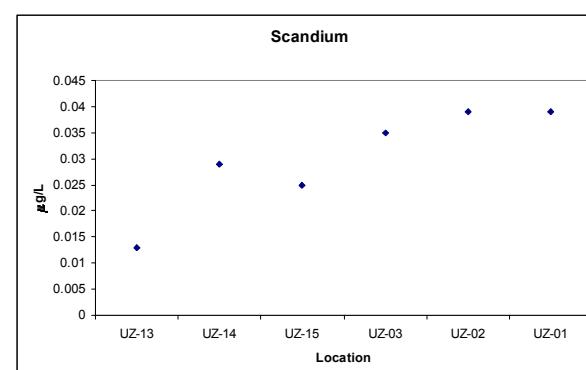
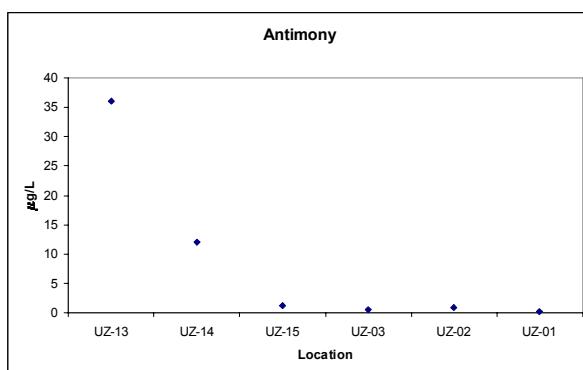
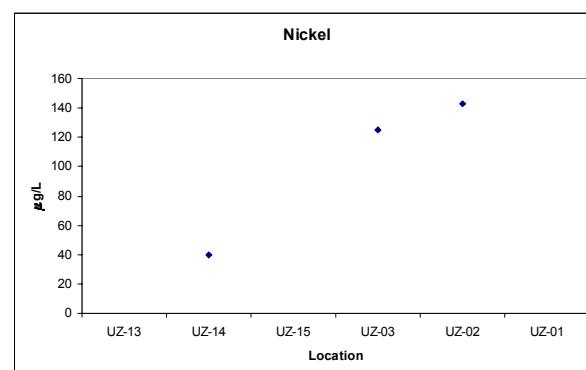
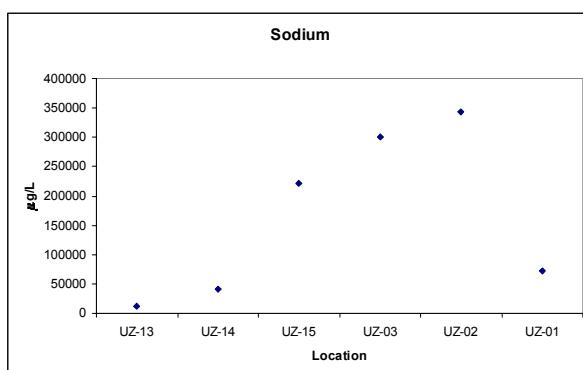
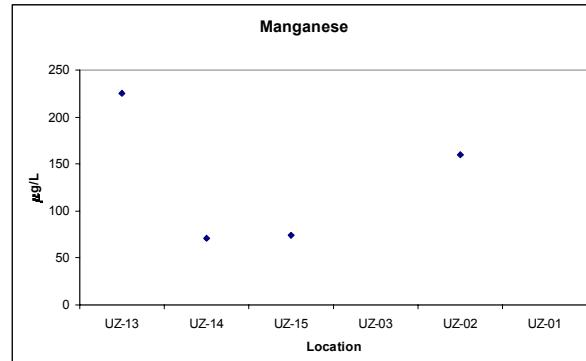
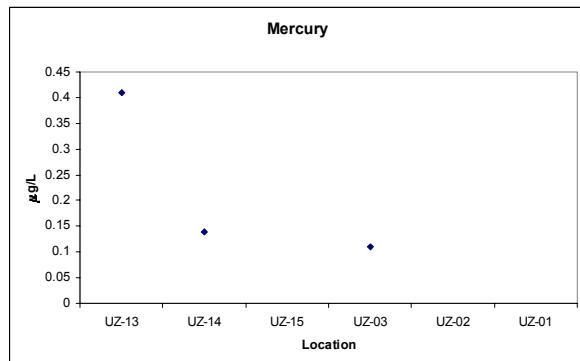
Provisional Data

Zaravshan/Amu Darya, Dissolved Metals Data, Spring 2001



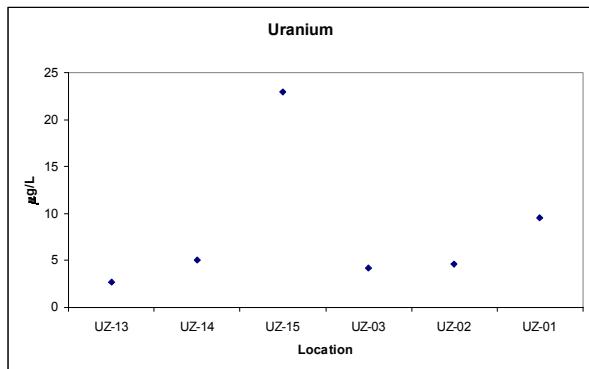
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Zaravshan/Amu Darya, Dissolved Metals Data, Spring 2001, continued



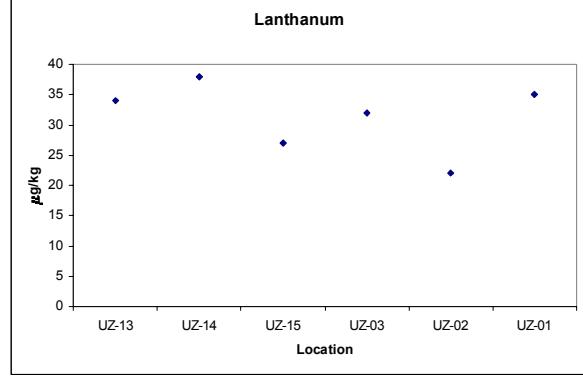
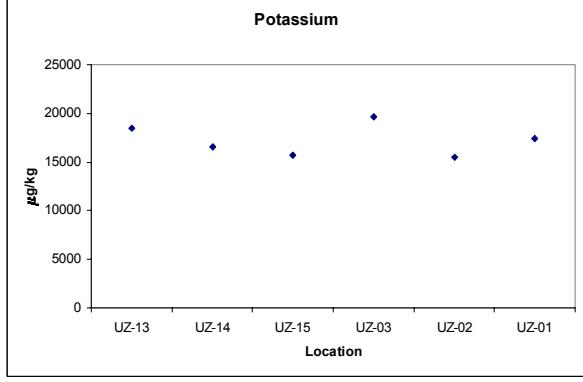
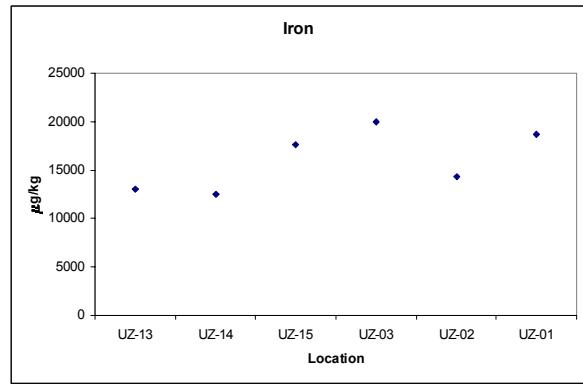
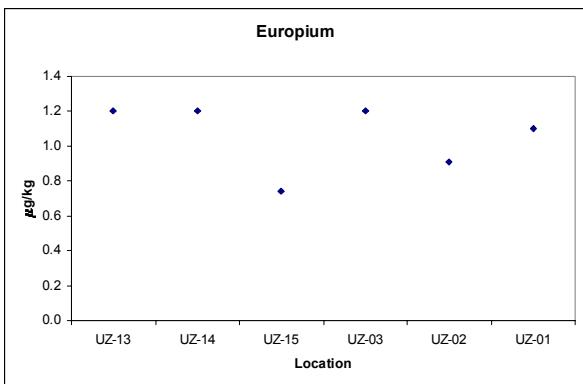
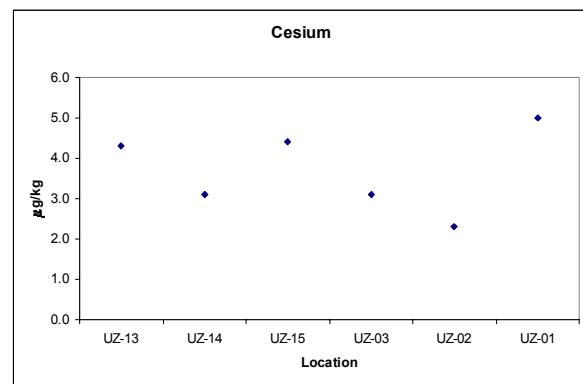
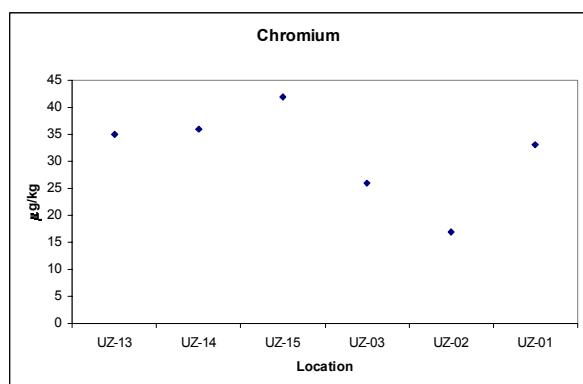
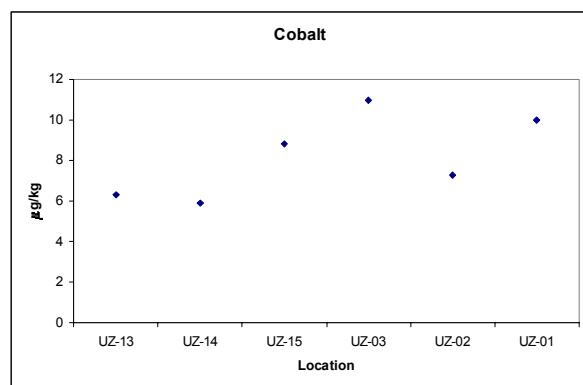
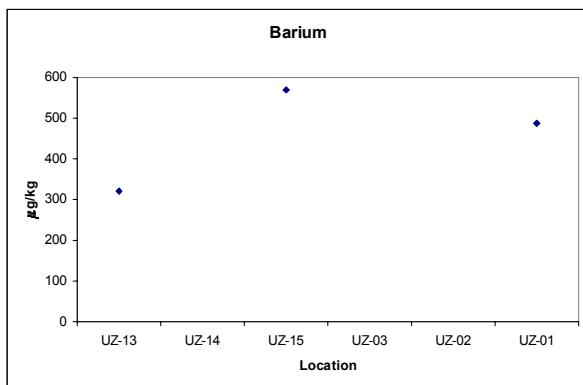
Provisional Data

Zaravshan/Amu Darya, Dissolved Metals Data, Spring 2001, continued

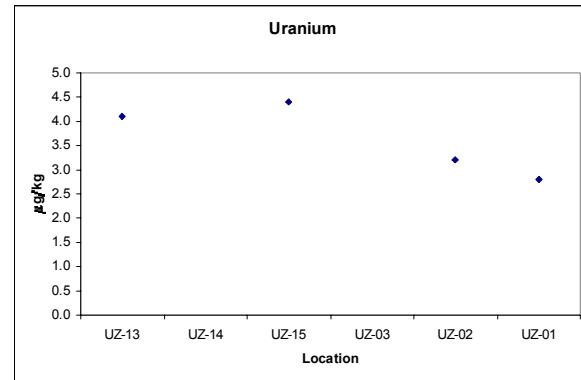
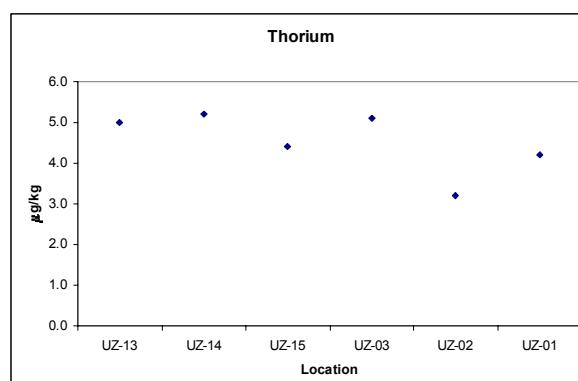
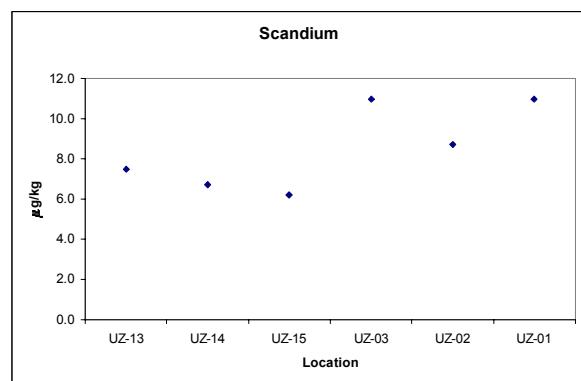
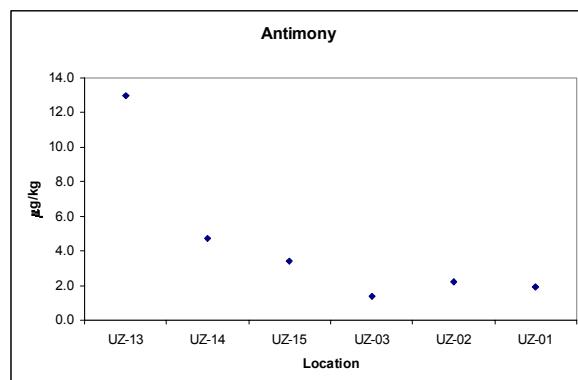
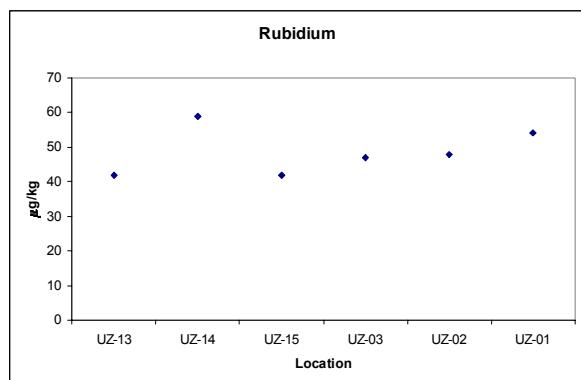
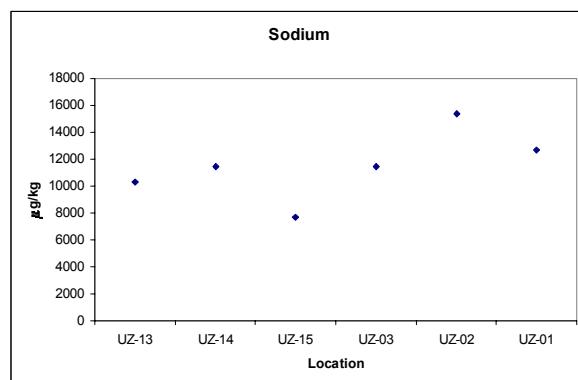
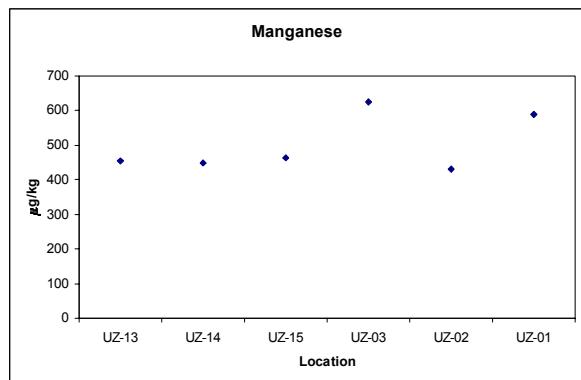


Provisional Data

Zaravshan/Amu Darya, Bottom Sediments Metals Data, Spring 2001

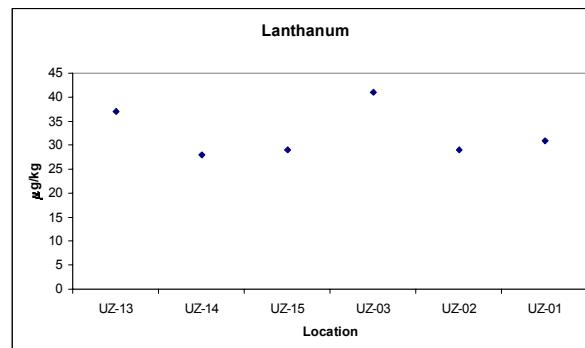
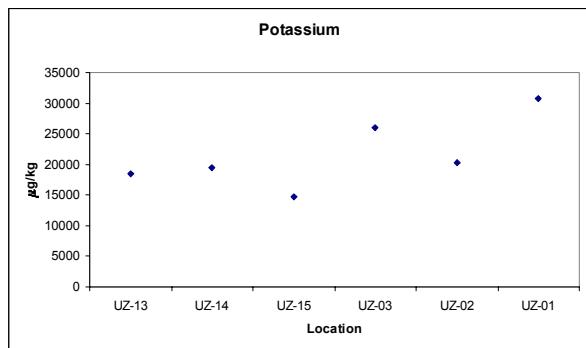
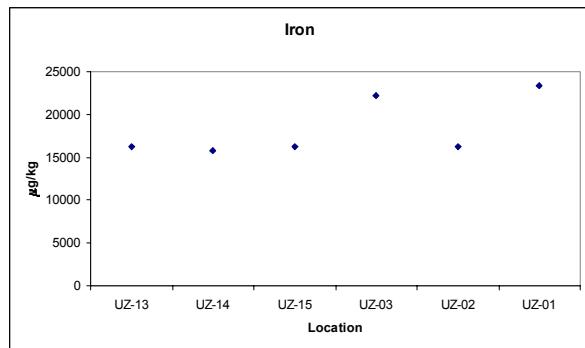
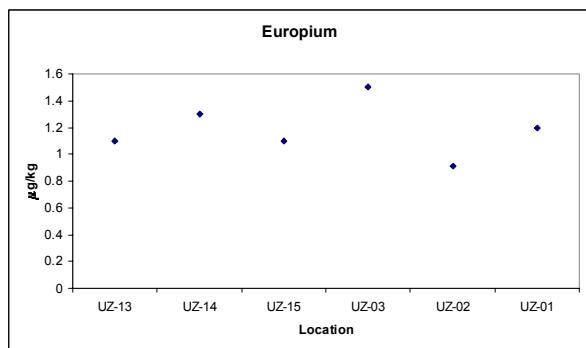
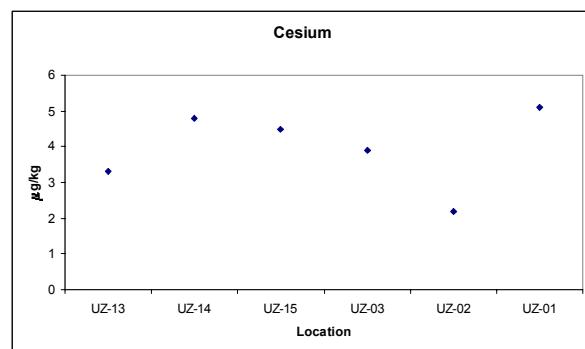
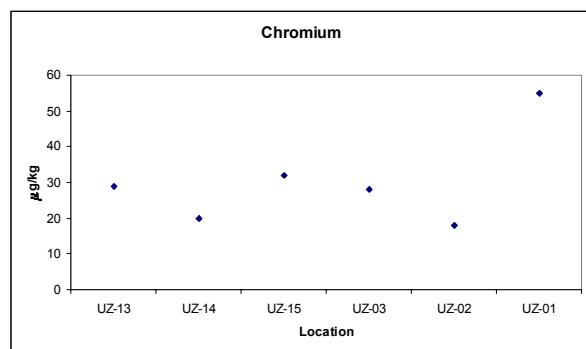
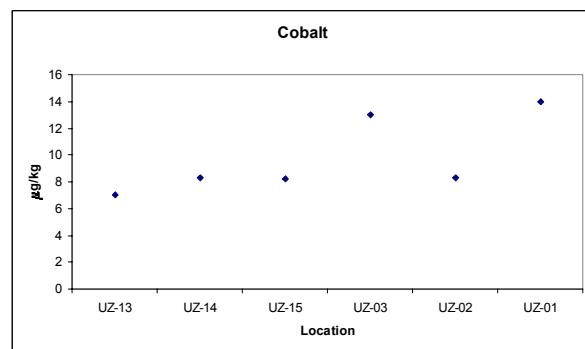
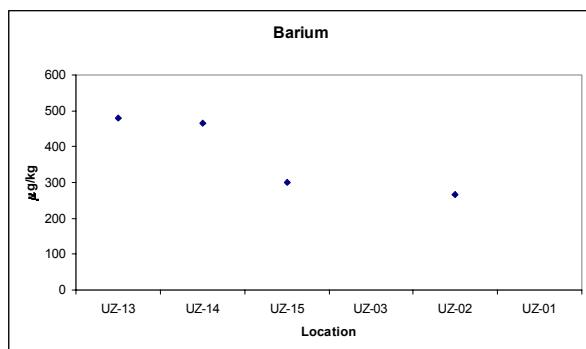


Zaravshan/Amu Darya, Bottom Sediments Metals Data, Spring 2001, continued



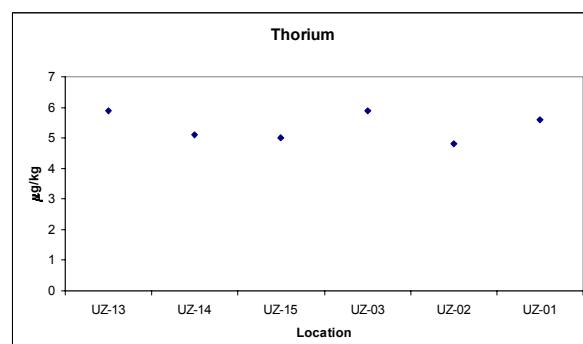
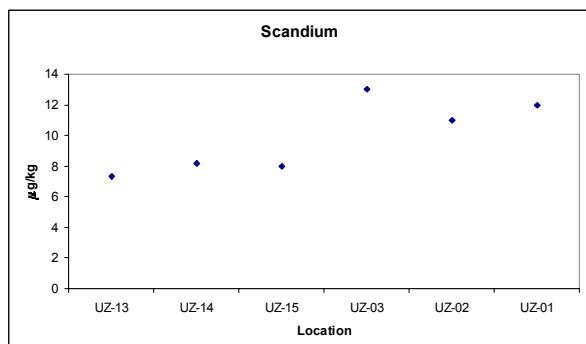
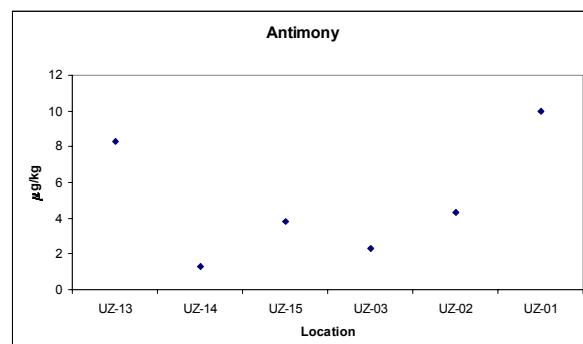
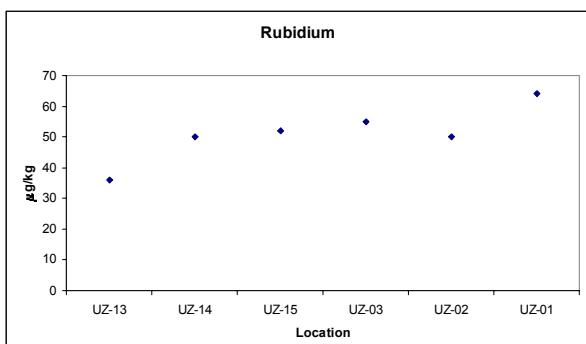
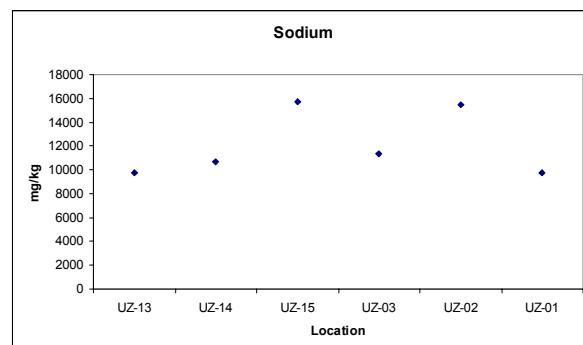
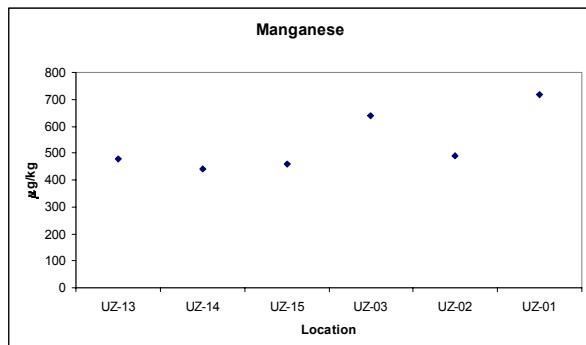
Provisional Data

Zaravshan/Amu Darya, Soils Metals Data, Spring 2001



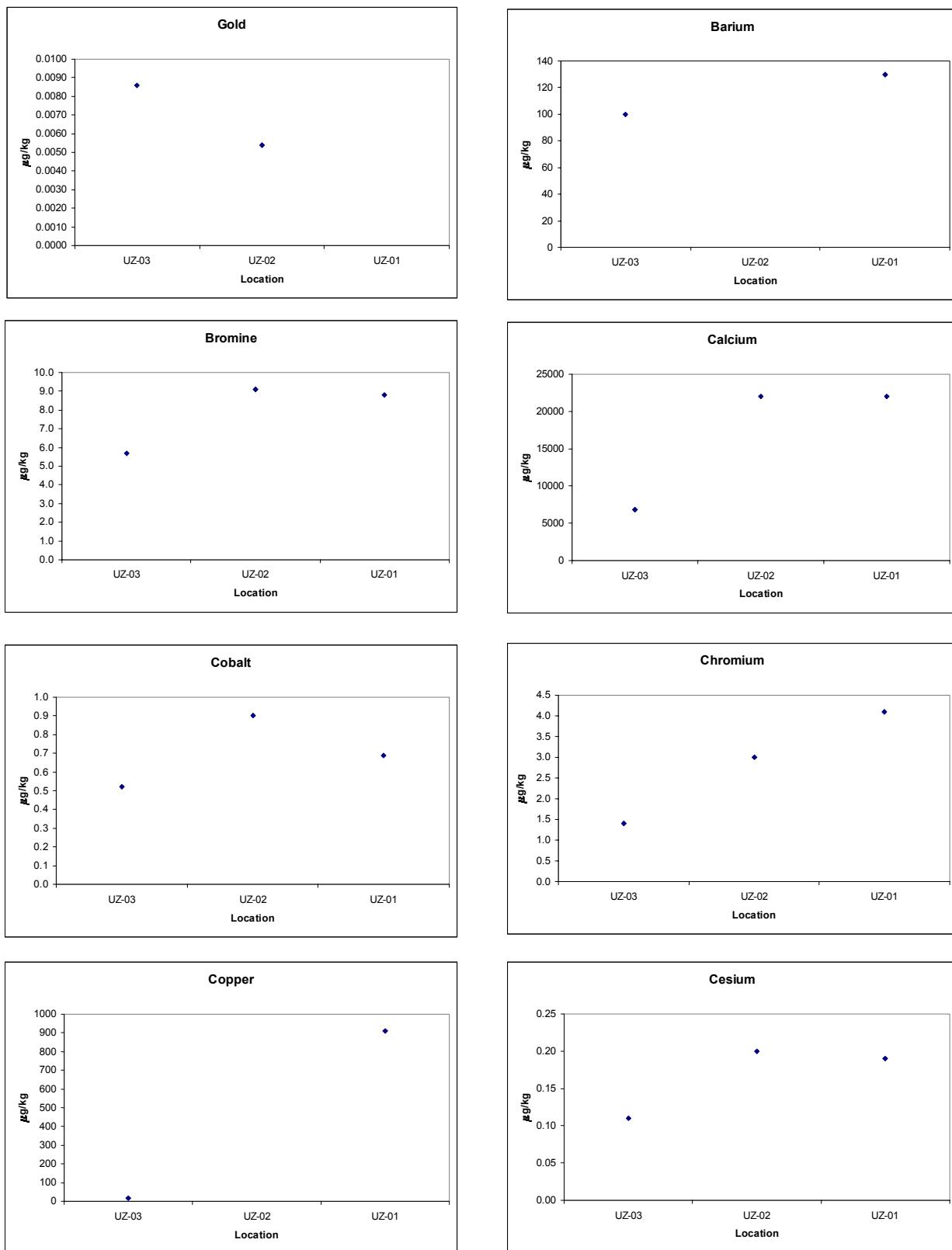
Provisional Data

Zaravshan/Amu Darya, Soils Metals Data, Spring 2001, continued



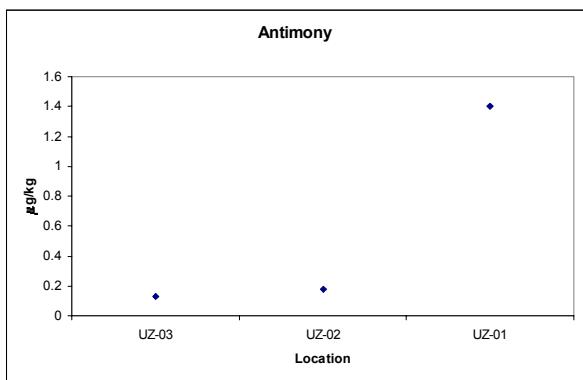
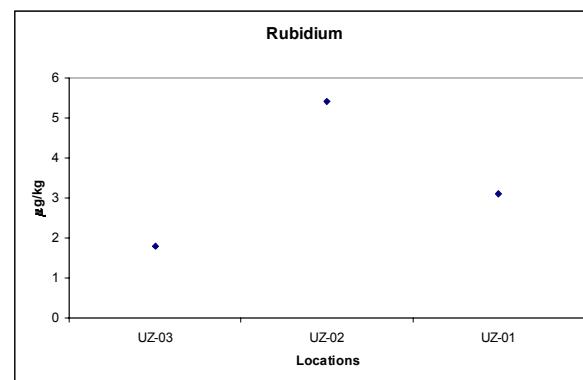
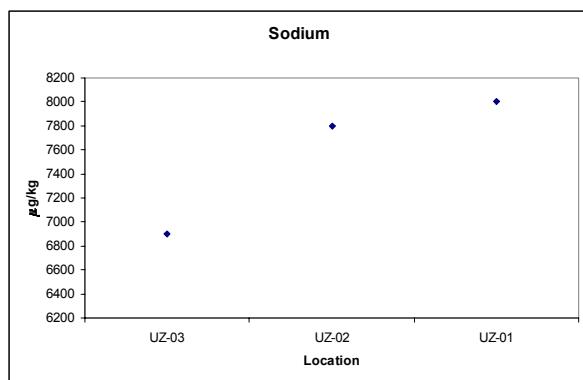
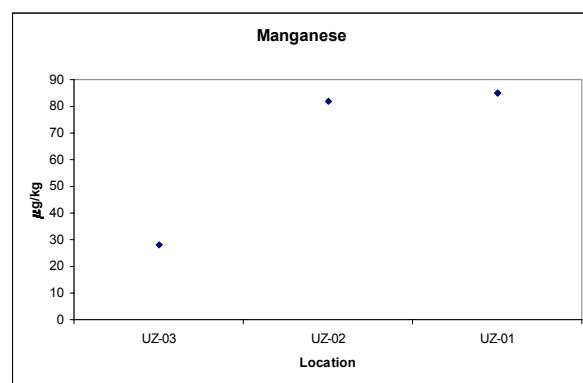
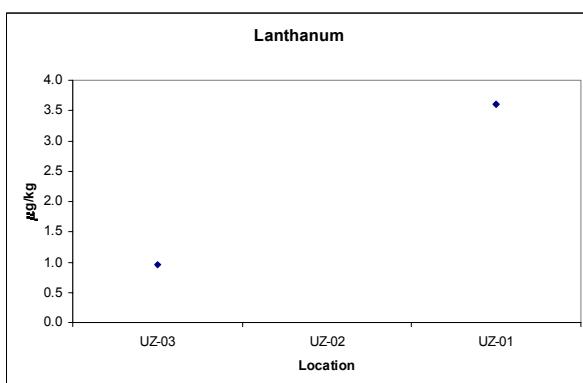
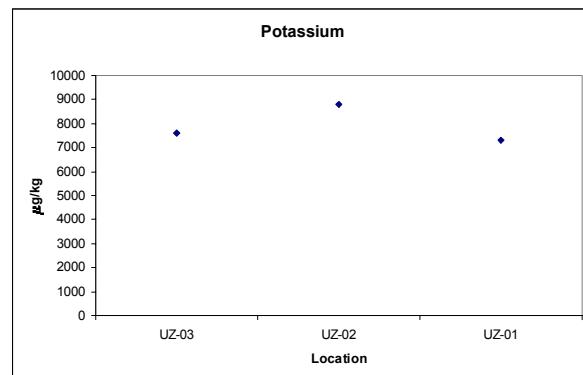
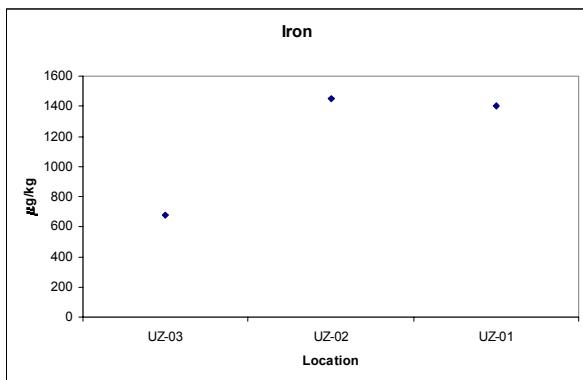
Provisional Data

Zaravshan/Amu Darya, Vegetation Metals Data, Fall 2000



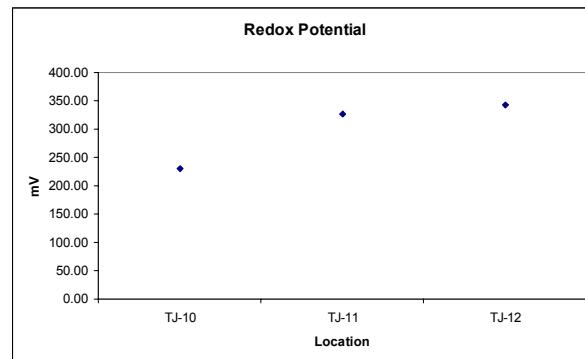
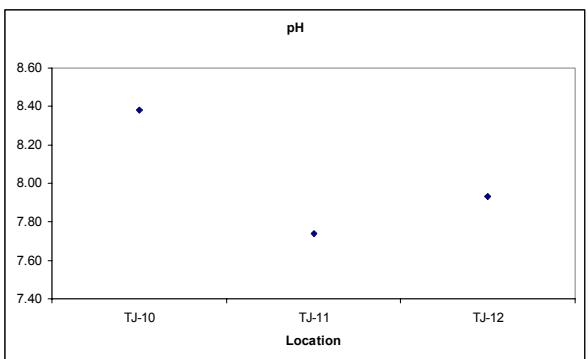
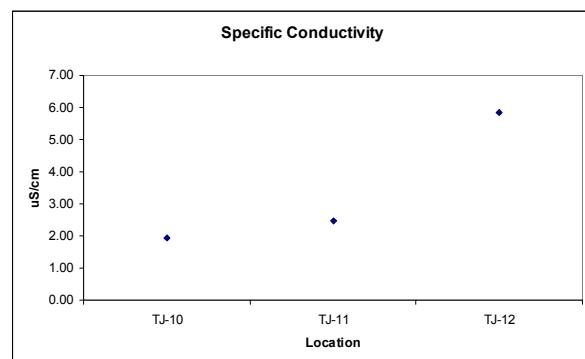
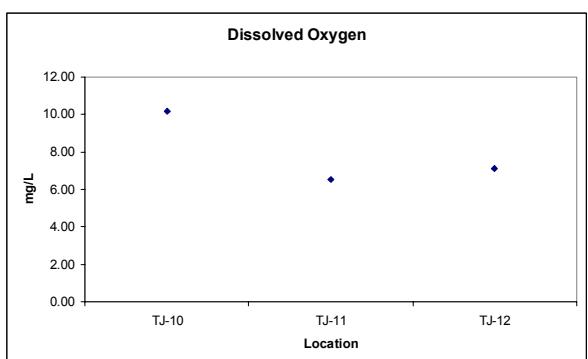
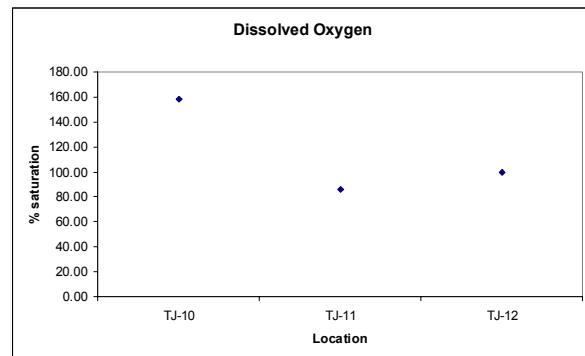
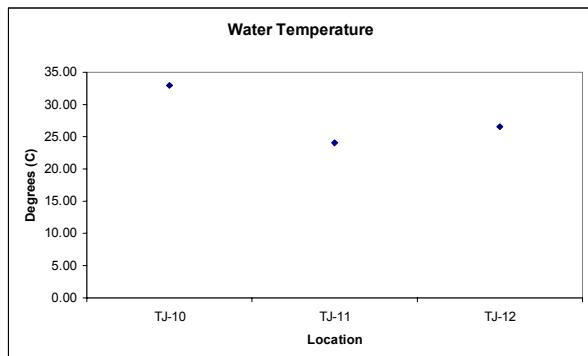
Provisional Data

Zaravshan/Amu Darya, Vegetation Metals Data, Fall 2000, continued



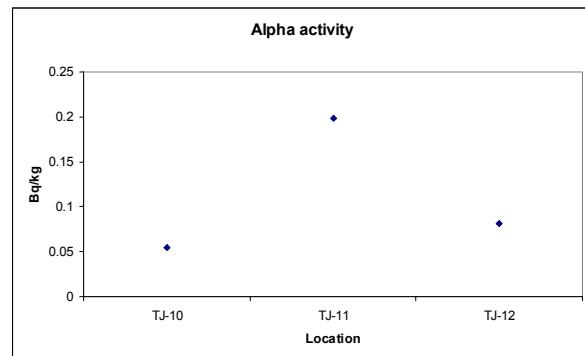
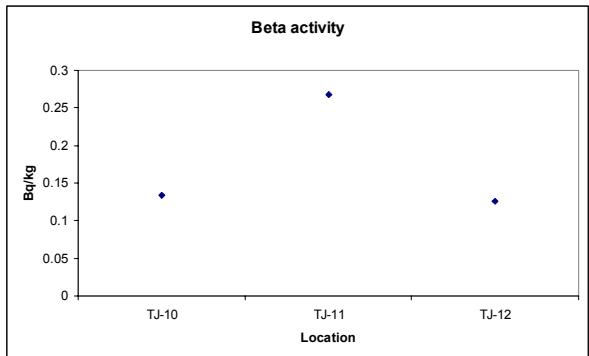
Provisional Data

Kyzylzu, Basic Water Quality, Spring 2001



Provisional Data

Kyzylzu, Dissolved Radionuclides Data, Spring 2001



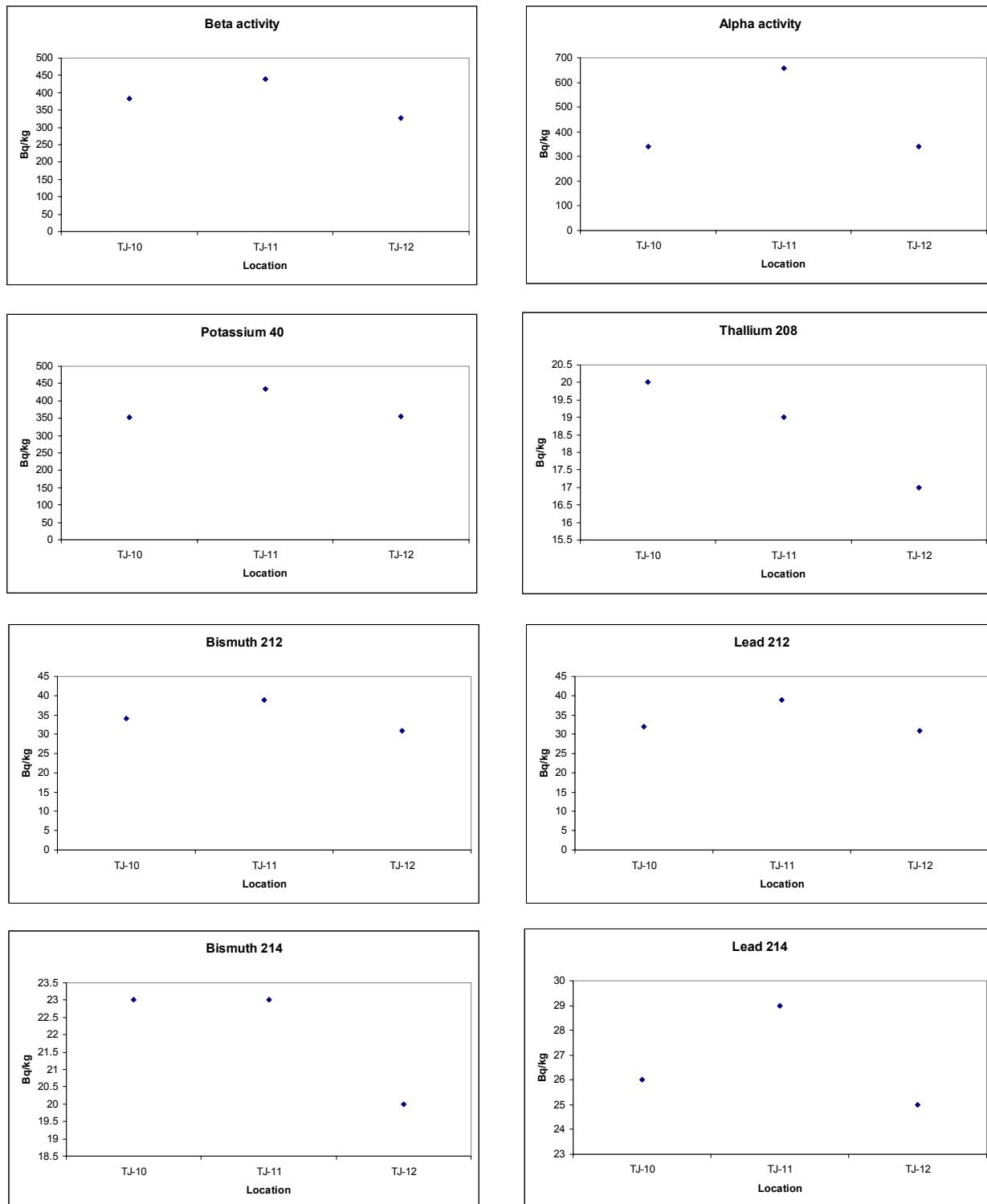
Provisional Data

Kyzylzu, Bottom Sediments Radionuclides Data, Fall 2000

Insufficient data available

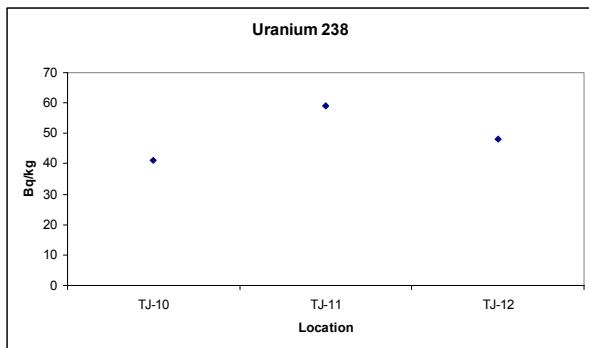
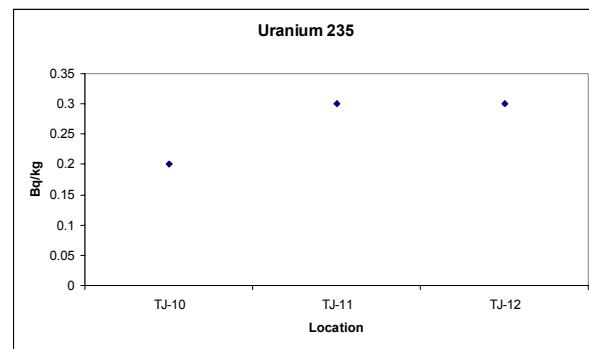
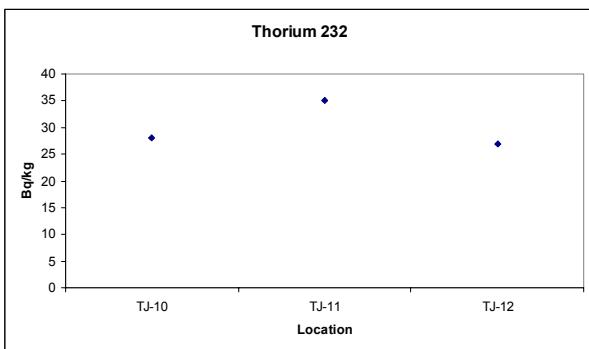
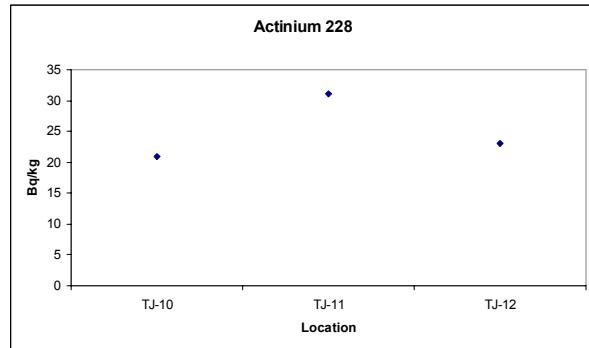
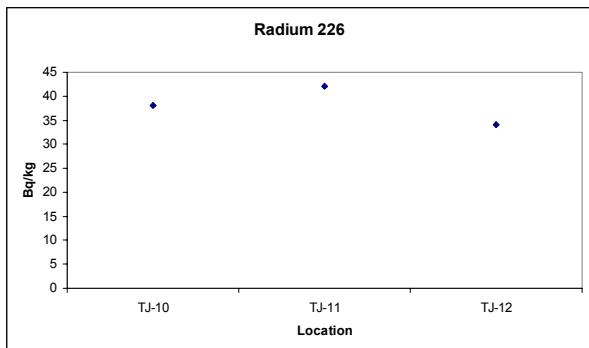
Provisional Data

Kyzylzu, Soils Radionuclides Data, Spring 2001



Provisional Data

Kyzylzu, Soils Radionuclides Data, Spring 2001, continued



Provisional Data

Kyzylzu, Vegetation Radionuclides Data, Spring 2001

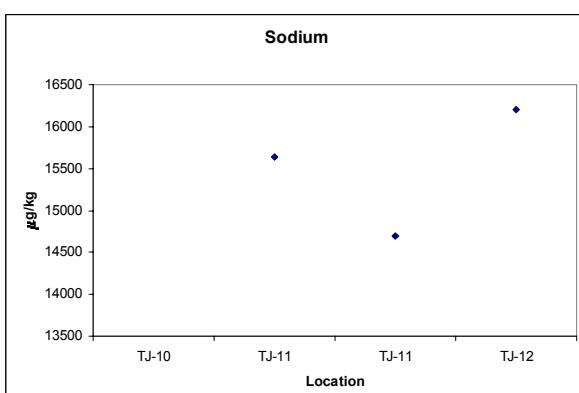
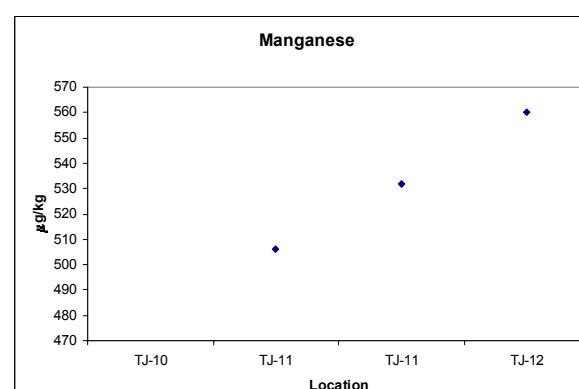
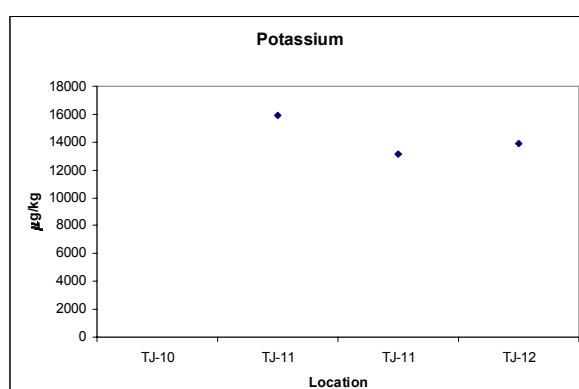
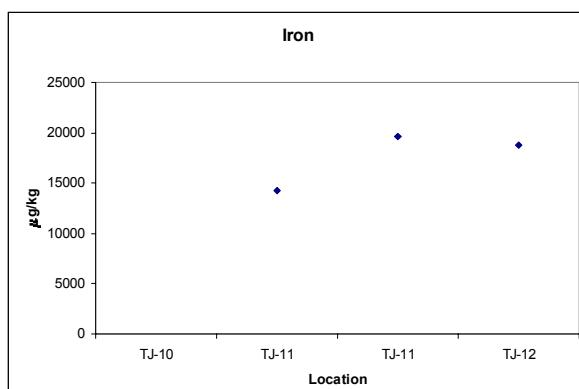
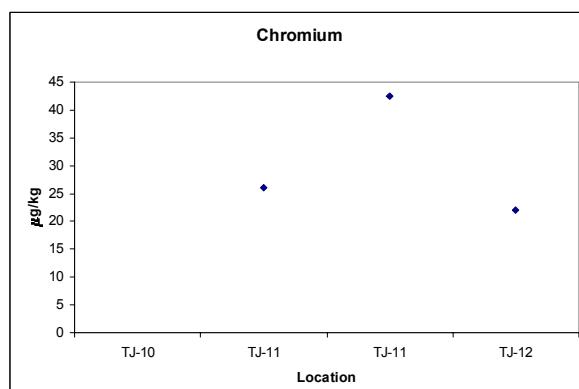
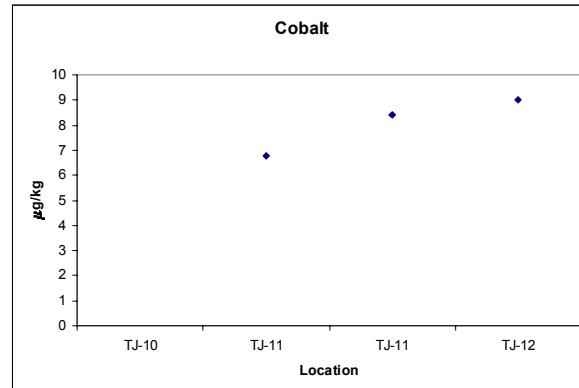
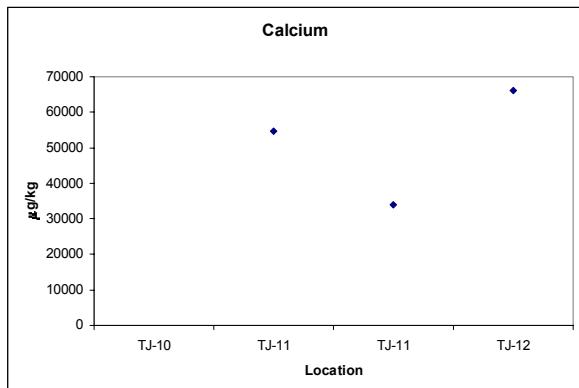
No data available

Kyzylzu, Dissolved Metals Data, Spring 2001

No data available

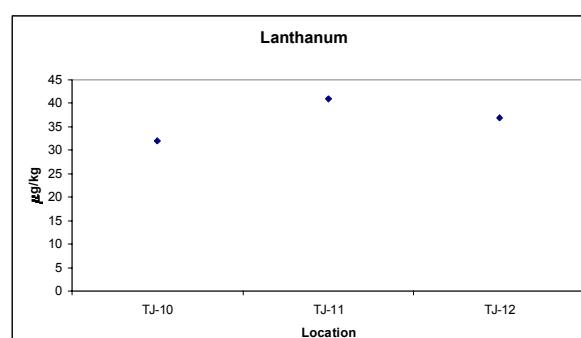
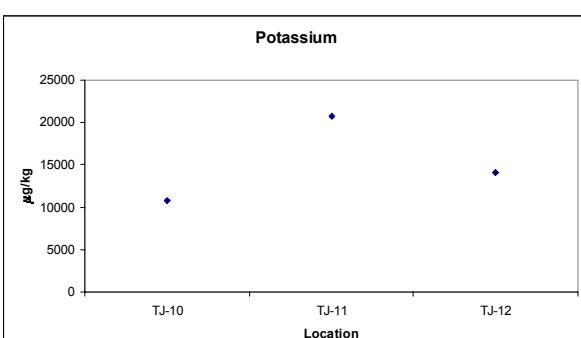
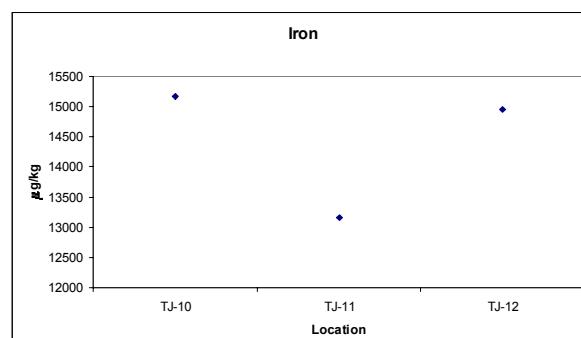
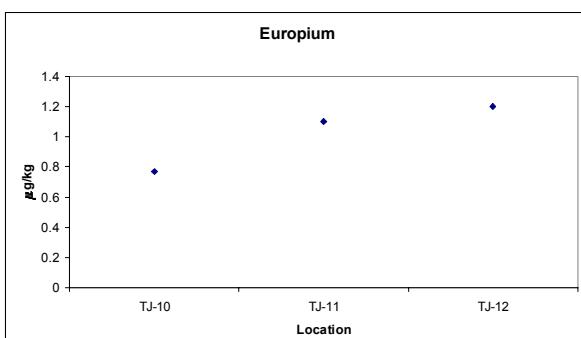
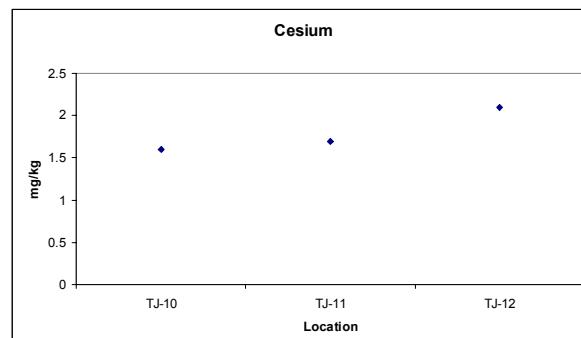
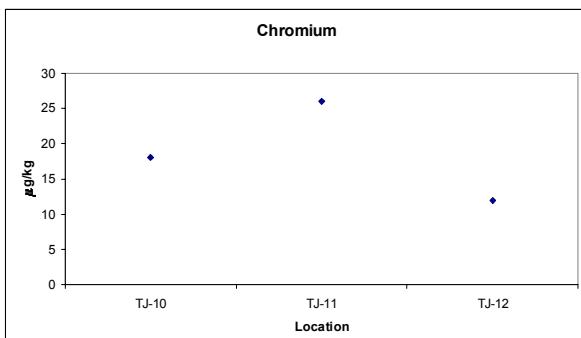
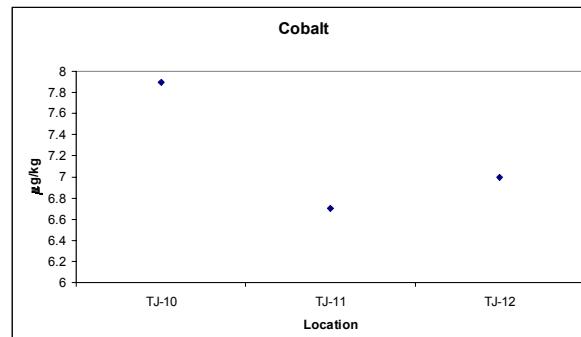
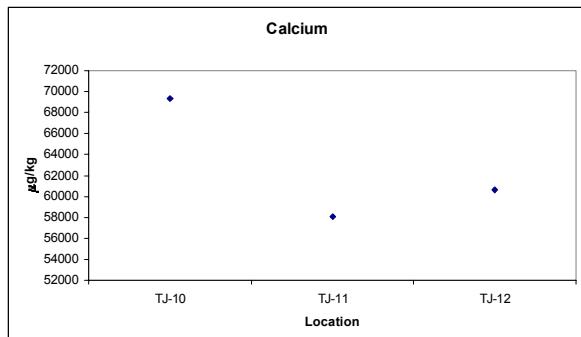
Provisional Data

Kyzylzu, Bottom Sediments Metals Data, Spring 2001



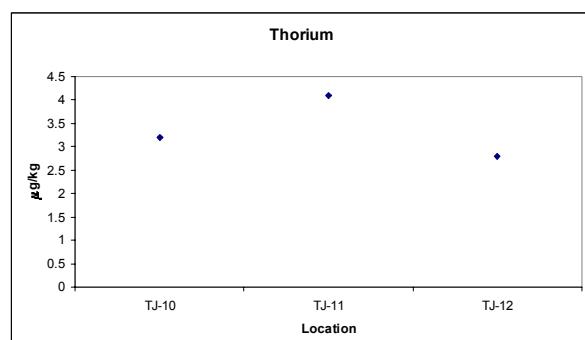
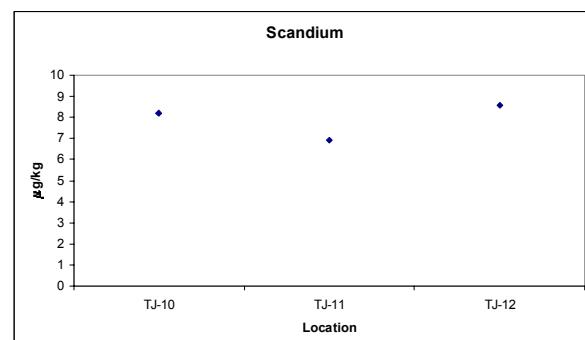
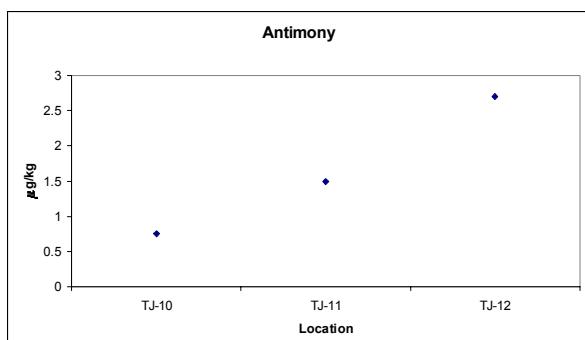
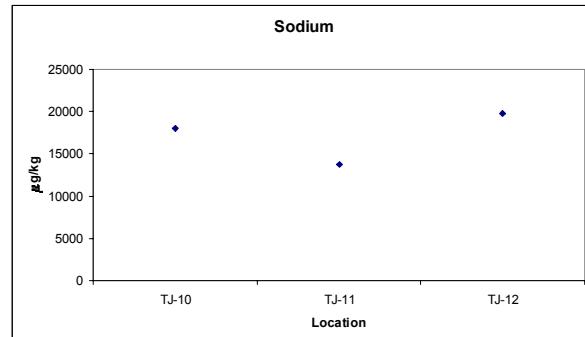
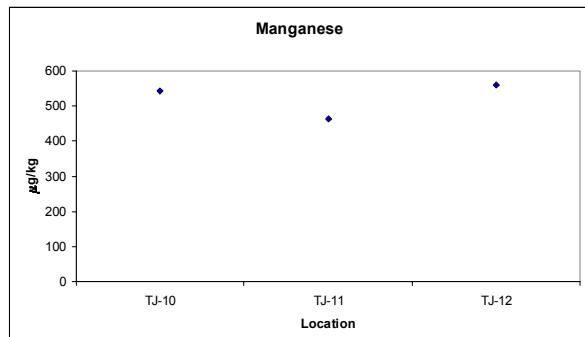
Provisional Data

Kyzylzu, Soils Metals Data, Spring 2001



Provisional Data

Kyzylzu, Soils Metals Data, Spring 2001, continued



Provisional Data

Kyzylzu, Vegetation Metals Data, Spring 2001

No data available.

Appendix B. Data

B.1 General

Tables in this Appendix show all data collected in the Navruz Project for sampling in Fall 2000, Spring 2001, and Fall 2001. Data are presented in tabular form.

The sample identification code is interpreted as shown in Figure 2.

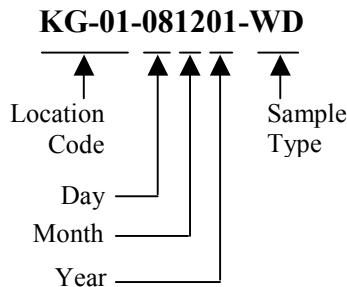


Figure 2. Sample Identification Code

Components of the sample identification code are as follows:

Location Code	As shown in Sections 1.4 through 1.8
Day, Month, Year	Date the sample was taken
Sample Type	One of the following: WD—Dissolved constituents WS—Suspended solid constituents B—Bottom sediments V—Vegetation S—Soil

More information on these data can be found at the web site <http://www.cmc.sandia.gov/Central/centralasia.html>, and in Passell *et al.* (2002).

Although data have undergone quality assurance review by principal investigators and others in the project, data are considered provisional, and principal investigators should be contacted prior to further use of the data.

B.2 Consolidated Data Listings—Uzbek Analysis

The following data listings represent the provisional results of analysis of Navruz water samples by the Institute of Nuclear Physics, Uzbekistan. Do not use these data for further research or publication before consulting with the Principle Investigator. For more information, refer to the Navruz project web site www.cmc.sandia.gov/Central/centralasia.html.

Unless otherwise stated, the units for all of the tables in this Appendix are as follows:

Measurement	Units
Water Dissolved (WD) radionuclides	milliBequerel/liter (mBq/l)
Water Suspended (WS) radionuclides	milliBequerel/liter (mBq/l)
Bottom sediments (B) radionuclides	Bequerel/kilogram (Bq/kg)
Soils (S) radionuclides	Bequerel/kilogram (Bq/kg)
Vegetation (V) radionuclides	Bequerel/kilogram (Bq/kg)
Water Dissolved (WD) and Water Suspended (WS) metals	microgram/liter ($\mu\text{g}/\text{l}$)
Bottom sediment (B), soil (S), and vegetation (V) metals	percent by weight (%) or gram/tonne (g/t)

B.2.1 Kazakhstan Basic Water Quality, Fall 2000

Sample ID	Water Temperature (deg C)	Dissolved Oxygen (% saturation)	Dissolved Oxygen (mg/L)	Specific Conductivity (mS/cm)	Salinity (g/L)	TDS (g/L)	Depth (m)	pH	Redox Potential (mV)
KZ-01-09122000	7.6	95.1	11.19	1368	0.72	0.875	1.1	8.33	373
KZ-02-08122000	5.7	98.2	12.13	1602	0.85	1.025	1.2	8.44	424
KZ-03-10122000	7.2	95.5	11.34	2705	1.46	1.731	0.9	8.29	376
KZ-04-10122000	7.4	99.2	11.72	2308	1.24	1.477	1.1	8.46	355
KZ-05-11122000	4.1	103	13.29	959.2	0.5	0.614	0.7	8.65	384
KZ-06-07122000	8.2	102.7	11.98	1222	0.64	0.782	1.0	8.20	398
KZ-07-05122000	4.4	96.6	12.37	1591	0.84	1.018	1.3	8.16	486
KZ-08-04122000	3.0	96.9	12.9	1693	0.9	1.084	1.3	8.11	376
KZ-09-03122000	2.7	96.2	12.87	1680	0.89	1.075	1.3	8.03	448
KZ-10-03122000	2.4	96.3	12.99	1713	0.91	1.096	1.2	8.05	455
KZ-11-02122000	1.3	96.5	13.41	1791	0.95	1.146	1.3	7.83	449
KZ-12-01122000	1.4	95.2	13.22	1787	0.95	1.143	1.2	7.94	467
KZ-13-01122000	1.0	95.9	13.44	1835	0.97	1.187	1.1	7.96	460
KZ-14-30112000	0.6	96.2	13.65	1902	1.02	1.217	1.4	7.94	453
KZ-15-29112000	-0.2	89.5	13.29	1858	1.00	1.203	1.4	7.90	442

B.2.2 Kazakhstan Radionuclides, Fall 2000

Sample ID	Beta activity (Bk/kg)	Alpha activity (Bk/kg)	K-40	Tl-208	Bi-212	Pb-212	Bi-214	Pb-214	Ra-226	Ac-228	Th-232	U-235	U-238
KZ-01-091200-WD	0.179	0.091	0.467	<0,01	<0,01	<0,01	0.033	<0,01	0.018	0.109	0.071	<0,01	0.048
KZ-01-091200-WS													
KZ-01-091200-B	771.5	399.2	623.7	54.4	75.9	67.2	35.3	34	84.1	49.5	45.3	3.6	37.8
KZ-01-091200-V				nd	nd		nd						
KZ-01-091200-S	nd	nd	nd										
KZ-02-081200-WD	0.3	0.243	0.467	0.073	<0,01	,0,01	0.165	<0,01	<0,01	0.069	0.032	<0,01	0.091
KZ-02-081200-WS													
KZ-02-081200-B	473.6	171.7	499.2	22.8	29.2	29	17.2	20.6	33.2	23	20.1	1.4	18.6
KZ-02-081200-V													
KZ-02-081200-S	602.9	171.7	497.7	29.3	31.3	33.6	23.1	25	39.6	28	26.2	1.7	26.8
KZ-03-101200-WD	0.171	0.139	0.234	<0,01	<0,01	0.091	0.039	0.021	<0,01	0.057	0.052	<0,01	0.051
KZ-03-101200-WS													
KZ-03-101200-B	623.7	515	609.9	36.3	59.1	41.8	24.6	27.5	53.7	37.8	34.6	2.3	27.9
KZ-03-101200-V													
KZ-03-101200-S	726.1	558	604.9	44.1	49.6	102.4	28.3	30.4	50.5	41.5	37.1	2.2	31.2
KZ-04-101200-WD	0.205	0.072	0.234	0.039	<0,01	0.091	0.039	<,0,	0.22	0.062	0.022	0.016	0.029
KZ-04-101200-WS								0.01					
KZ-04-101200-B	501.3	300.4	520	38.5	48.1	44.5	28.7	30.8	51	37.2	34.5	2.2	30.1
KZ-04-101200-V													
KZ-04-101200-S	645.2	336.2	579.2	40.5	49.5	47	30.2	33.1	52.5	41.1	36.8	2.2	32.2

Provisional Data

Analysis performed by Uzbekistan Institute of Nuclear Physics

Sample ID	Beta activity (Bk/kg)	Alpha activity (Bk/kg)	K-40	Tl-208	Bi-212	Pb-212	Bi-214	Pb-214	Ra-226	Ac-228	Th-232	U-235	U-238
KZ-05-111200-WD	0.101	0.043	0.467	<0,01	<0,01	<0,01	0.019	0.011	<0,01	0.024	<0,01	<0,01	<0,01
KZ-05-111200-WS													
KZ-05-111200E-B	516.3	369.1	451.3	28.7	32.1	12.7	26.7	27	48.4	30	26.8	2.1	29.7
KZ-05-111200-V													
KZ-05-111200-S	550	313.3	475.3	34.8	48.3	40.4	27.7	28.8	37.8	31	27.2	1.6	30.1
KZ-06-071200-WD	0.16	0.164	0.467	0.118	<0,01	<0,01	0.02	0.083	0.046	0.209	0.091	0.032	0.021
KZ-06-071200-WS						0							
KZ-06-071200-B	382.6	290.4	358	19.6	<0,01	26.5	19.6	21.5	38.2	26	24.1	1.6	21.6
KZ-06-071200-V													
KZ-06-071200-S	394.8	158.8	396.6	24	25.9	27.7	19.7	21.6	42.1	24.7	21.3	1.8	20.7
KZ-07-051200-WD	0.334	0.073	0.467	<0,01	<0,01	<0,01	0.033	0.01	<0,01	0.109	<0,01	<0,01	0.03
KZ-07-051200-WS													
KZ-07-051200-B	629	343.4	451.4	36.3	42.6	42.1	29.4	29.9	55.1	37.2	35.1	2.3	31.2
KZ-07-051200-V													
KZ-07-051200-S	546.1	141.6	521.8	55.7	51.8	44.1	32.1	31.1	62.1	37	35.4	2.6	35.1
KZ-08-041200-WD	0.397	0.167	4.67	0.313	<0,01	<0,01	0.173	0.187	0.053	0.302	0.172	0.024	0.194
KZ-08-041200-WS													
KZ-08-041200-B	548.9	141.6	483.1	29	36.1	31.6	20.8	26.5	35.8	26	23.1	1.5	24.2
KZ-08-041200-V													
KZ-08-041200-S	579.7	326.2	519.8	36.7	57	42.5	29.2	32.8	57	33.7	30.1	2.4	32.7
KZ-09-031200-WD	0.344	0.19	2.336	0.181	<0,01	<0,01	0.194	0.021	0.055	0.308	0.154	0.023	0.115
KZ-09-031200-WS													

Provisional Data

Analysis performed by Uzbekistan Institute of Nuclear Physics

Sample ID	Beta activity (Bk/kg)	Alpha activity (Bk/kg)	K-40	Tl-208	Bi-212	Pb-212	Bi-214	Pb-214	Ra-226	Ac-228	Th-232	U-235	U-238
KZ-09-031200-B	516.6	128.8	511.2	28.1	32.3	31.7	20.4	23.4	34.6	27	25.1	1.5	23.8
KZ-09-031200-V													
KZ-09-031200-S	659.8	429.2	431.7	37.3	48.8	43.8	28	30.8	53.8	31.4	29.1	2.3	30.3
KZ-10-031200-WD	0.288	0.251	0.234	0.121	<0,01	<0,01	0.162	0.019	0.015	0.246	0.131	<0,01	0.091
KZ-10-031200-WS													
KZ-10-031200-B	531.9	227.5	510.9	30.5	40.7	35.1	22.6	27.3	41.4	36.5	34.1	1.8	25.3
KZ-10-031200-V													
KZ-10-031200-S	669.4	283.3	452.6	30.3	48.4	34.1	26.2	29.5	39.2	30.6	27.8	1.7	38.3
KZ-11-021200-WD	0.537	0.389	2.336	0.157	0.305	<0,01	<0,01	<0,01	<0,01	0.057	0.092	<0,01	<0.01
KZ-11-021200-WS													
KZ-11-021200-B	533.7	399.2	478.6	39.8	43.2	48	30.6	34	56.1	39	37.1	2.4	32.5
KZ-11-021200-V													
KZ-11-021200-S	564.2	257.5	421.8	30.5	44.6	36.4	27.8	28	58.8	35	32.4	2.5	29.2
KZ-12-011200-WD	0.4	0.28	0.467	<0,01	<0,01	<0,01	<0,01	0.083	<0,01	0.057	<0,01	<0,01	<0,01
KZ-12-011200-WS													
KZ-12-011200-B	493.6	201.7	487.1	28.3	46.4	33.3	23	24	41.9	28.3	26.1	1.8	26.7
KZ-12-011200-V													
KZ-12-011200-S	517.1	128.8	465.4	30.7	41.9	36.8	25.6	26.3	47.6	28	25.9	2	28.3
KZ-13-011200-WD	0.338	0.257	0.234	<0,01	<0,01	<0,01	0.194	<0,01	0.048	0.331	0.229	0.019	0.193
KZ-13-011200-WS													
KZ-13-011200-B	519.4	356.2	476.9	30.4	45.6	38.3	26.7	27	47.4	33.5	30.8	2	28.1
KZ-13-011200-V													

Provisional Data**Analysis performed by Uzbekistan Institute of Nuclear Physics**

Sample ID	Beta activity (Bk/kg)	Alpha activity (Bk/kg)	K-40	Tl-208	Bi-212	Pb-212	Bi-214	Pb-214	Ra-226	Ac-228	Th-232	U-235	U-238
KZ-13-011200-S	525.6	343.4	440.6	33.7	<0,01	35	24	25	60.9	29.4	25.1	2.6	26.2
KZ-14-301100-WD	0.369	0.461	0.467	0.039	<0,01	<0,01	0.058	0.021	0.048	0.054	0.057	0.002	0.01
KZ-14-301100-WS													
KZ-14-301100-B	612.2	30	502.3	34.4	34.7	35.3	24.4	27.5	44.3	33	33	1.9	26.1
KZ-14-301100-V													
KZ-14-301100-S	522.5	141.6	384.7	23.4	37.7	26.5	18.5	24.9	36.6	23	22.9	1.6	19.8
KZ-15-291100-WD	0.399	0.418	0.234	0.039	<0,01	0.068	0.028	0.063	0.053	0.123	0.115	0.021	0.028
KZ-15-291100-WS													
KZ-15-291100-B	287.9	42.9	234.5	9.1	19	9.4	6.3	8	16.4	8.7	8.3	0.7	8.1
KZ-15-291100-V													
KZ-15-291100-S	426.7	257.5	378.1	26.9	<0,01	26.9	17.2	18.7	37.3	23	21.2	1.6	18.4

B.2.3 Kazakhstan Metals, Fall 2000
Ag through Mn

Sample ID	Ag	Au	Ba	Br	Ca	Co	Cr	Cu	Cs	Fe	Hg	K	La	Mn
KZ-01-091200-WD	<0,1	<0.001	<20	<5	66230	0.86	<1	nd	<0,01	206	<0,01	nd	<1	<1
KZ-01-091200-WS														
KZ-01-091200-B	<0,1	<0.001	357	<1	31350	8	44	nd	4.4	18400	<0,01	18600	24.2	700
KZ-01-091200-V														
KZ-01-091200-S														
KZ-02-081200-WD	<0,1	<0.001	<20	<5	119250	35	<1	nd	13	390	<0,01	nd	<1	<1
KZ-02-081200-WS														
KZ-02-081200-B	<0,1	<0.001	<100	<1	28860	4.6	49	nd	1.6	10100	<0,01	19200	14.5	386
KZ-02-081200-V														
KZ-02-081200-S	<0,1	<0.001	476	<1	29050	4.8	16	nd	1.8	10570	<0,01	24000	21.4	450
KZ-03-101200-WD	<0,1	<0.001	<20	16	225226	3	23	nd	<0,01	<100	<0,01	nd	<1	<1
KZ-03-101200-WS														
KZ-03-101200-B	<0,1	<0.001	420	<1	23830	3.7	26	nd	1.8	8640	<0,01	25000	23.4	420
KZ-03-101200-V														
KZ-03-101200-S	<0,1	<0,001	340	<1	21480	4.8	9.8	nd	3.1	11090	<0,01	23700	22.2	490
KZ-04-101200-WD	<0,1	<0.001	<20	36	179700	5.1	15	2770	<0,01	388	<0,01	nd	3.7	13
KZ-04-101200-WS														
KZ-04-101200-B	<0,1	<0.001	230	<1	29300	4.7	28	nd	1.9	11590	<0,01	15100	25.9	500
KZ-04-101200-V														
KZ-04-101200-S	<0,1	<0,001	645	<1	33280	5.9	24	nd	3.6	13280	<0,01	31500	25.6	580

Provisional Data

Analysis performed by Uzbekistan Institute of Nuclear Physics

Sample ID	Ag	Au	Ba	Br	Ca	Co	Cr	Cu	Cs	Fe	Hg	K	La	Mn
KZ-05-111200-WD	<0,1	<0,001	73	6.4	86480	0.19	4.8	700	0.15	123	<0,01	nd	<1	<1
KZ-05-111200-WS														
KZ-05-111200E-B	<0,1	<0,001	<100	<1	57930	5.7	21	nd	1.7	11100	<0,01	20100	19.8	560
KZ-05-111200-V														
KZ-05-111200-S	<0,1	<0,001	230	<1	49910	7.7	49	nd	3.1	14600	<0,01	17700	28.6	660
KZ-06-071200-WD	<0,1	<0,001	74	<1	53740	0.17	347	940	0.21	131	<0,01	nd	1.3	<1
KZ-06-071200-WS														
KZ-06-071200-B	<0,1	<0,001	330	<1	68790	4.7	25	nd	1.5	7640	<0,01	15600	16	364
KZ-06-071200-V														
KZ-06-071200-S	<0,1	<0,001	<100	<1	58320	4.9	45	nd	1.8	9270	<0,01	14700	20.7	450
KZ-07-051200-WD	<0,1	<0,001	150	3.3	147910	0.15	4.6	1200	0.077	170	<0,01	nd	<1	<1
KZ-07-051200-WS														
KZ-07-051200-B	<0,1	<0,001	360	<1	36240	5.7	28	nd	2	12000	<0,01	16300	20	555
KZ-07-051200-V														
KZ-07-051200-S	<0,1	<0,001	416	<1	37400	5.5	26	nd	1.6	10925	<0,01	24600	17.2	565
KZ-08-041200-WD	<0,1	<0,001	213	7	144870	0.32	5	1760	0.25	580	<0,01	nd	<1	<1
KZ-08-041200-WS														
KZ-08-041200-B	<0,1	<0,001	320	<1	36050	5.2	19	nd	1.5	11220	<0,01	19300	16.2	420
KZ-08-041200-V														
KZ-08-041200-S	<0,1	<0,001	380	<1	25180	7.3	17	nd	3.6	12890	<0,01	23600	57	646
KZ-09-031200-WD	2.9	<0,001	179	5.2	189900	0.19	<1	1780	<0,01	140	<0,01	nd	<1	<1
KZ-09-031200-WS														
KZ-09-031200-B	<0,1	<0,001	<100	<1	30250	4.3	21	nd	1.4	10350	<0,01	16700	28.5	440

Provisional Data

Analysis performed by Uzbekistan Institute of Nuclear Physics

Sample ID	Ag	Au	Ba	Br	Ca	Co	Cr	Cu	Cs	Fe	Hg	K	La	Mn
KZ-09-031200-V														
KZ-09-031200-S	<0,1	<0.001	410	<1	35200	7.4	35	nd	2.3	13165	<0,01	22000	22.7	556
KZ-10-031200-WD	4.1	<0,001	160	10	164500	0.25	3.2	1560	0.15	220	<0,01	nd	2.4	<1
KZ-10-031200-WS														
KZ-10-031200-B	<0,1	<0.001	<100	<1	43460	5.8	36	nd	2.9	11410	<0,01	15100	23.4	533
KZ-10-031200-V														
KZ-10-031200-S	<0,1	<0.001	256	<1	32900	6.6	30	nd	2.7	11510	<0,01	20000	20.3	555
KZ-11-021200-WD	1	<0,001	260	15	210760	0.38	3.4	1755	0.027	436	<0,01	nd	<1	<1
KZ-11-021200-WS														
KZ-11-021200-B	<0,1	<0.001	530	<1	40370	6.1	20	nd	2.5	12250	<0,01	16700	24	590
KZ-11-021200-V														
KZ-11-021200-S	<0,1	<0.001	<100	<1	33100	5.2	49	nd	3.4	12260	<0,01	25300	18.6	500
KZ-12-011200-WD	<0,1	<0,001	190	21	206260	0.32	4	1830	0.22	326	<0,01	nd	10	<1
KZ-12-011200-WS														
KZ-12-011200-B	<0,1	<0.001	378	<1	49830	5.8	27	nd	2.3	10300	<0,01	20600	21.7	440
KZ-12-011200-V														
KZ-12-011200-S	<0,1	<0.001	<100	<1	35110	7.8	33	nd	2	15570	<0,01	22100	19.4	623
KZ-13-011200-WD	0.72	<0,001	170	11	245530	0.23	<1	1130	0.41	523	<0,01	nd	1.5	<1
KZ-13-011200-WS														
KZ-13-011200-B	<0,1	<0.001	246	<1	55940	5.2	22	nd	2.5	11220	<0,01	18700	25.8	470
KZ-13-011200-V														
KZ-13-011200-S	<0,1	<0.001	<100	<1	44050	5	14	nd	3.5	11640	<0,01	26500	16	450
KZ-14-301100-WD	<0,1	<0,001	224	8.5	219060	0.63	3.5	1440	<0,01	805	<0,01	nd	4.1	<1

Provisional Data**Analysis performed by Uzbekistan Institute of Nuclear Physics**

Sample ID	Ag	Au	Ba	Br	Ca	Co	Cr	Cu	Cs	Fe	Hg	K	La	Mn
KZ-14-301100-WS														
KZ-14-301100-B	<0,1	<0.001	294	<1	48230	5.5	21	nd	2.9	10160	<0,01	21400	21.8	420
KZ-14-301100-V														
KZ-14-301100-S	<0,1	<0.001	280	<1	39350	5.4	22	nd	1.9	10440	<0,01	22600	18.8	446
KZ-15-291100-WD	<0,1	<0.001	176	8.1	388575	0.29	5.2	1810	0.35	707	<0,01	nd	2.6	<1
KZ-15-291100-WS														
KZ-15-291100-B	<0,1	<0.001	<100	<1	6840	2.4	28	nd	1.1	4430	<0,01	10100	8.9	165
KZ-15-291100-V														
KZ-15-291100-S	<0,1	<0.001	<100	<1	17860	5	53	nd	2.5	11200	<0,01	12200	16.5	340

B.2.4 Kazakhstan Metals, Fall 2000
Na through U

Sample ID	Na	Ni	Rb	Sb	Sc	Se	Th	Zn	U
KZ-01-091200-WD	nd	<30	<1	<0,1	0.086	<0,1	<0,1	14	5.3
KZ-01-091200-WS									
KZ-01-091200-B	6936	<30	57	0.8	10.6	<0,1	5.1	nd	<1
KZ-01-091200-V									
KZ-01-091200-S									
KZ-02-081200-WD	nd	<30	<1	<0,1	0.1	<0,1	<0,1	41	7.5
KZ-02-081200-WS									
KZ-02-081200-B	10990	<30	34	<0,1	5.3	<0,1	2.6	nd	<1
KZ-02-081200-V									
KZ-02-081200-S	10810	<30	25	<0,1	6.1	<0,1	3	nd	<1
KZ-03-101200-WD	nd	<30	<1	<0,1	0.14	<0,1	<0,1	30	14
KZ-03-101200-WS									
KZ-03-101200-B	11080	<30	28	1.6	5.6	<0,1	4.4	nd	<1
KZ-03-101200-V									
KZ-03-101200-S	13044	<30	58	<0,1	6.3	<0,1	4.1	nd	<1
KZ-04-101200-WD	52410	nd	<1	0.92	0.17	4.3	<0,1	105	16
KZ-04-101200-WS									
KZ-04-101200-B	11556	<30	52	1.6	6.8	<0,1	4.4	nd	<1
KZ-04-101200-V									
KZ-04-101200-S	10300	<30	34	<0,1	7.5	<0,1	4.6	nd	<1

Sample ID	Na	Ni	Rb	Sb	Sc	Se	Th	Zn	U
KZ-05-111200-WD	22000	33	1.9	0.37	0.033	1.3	<0,1	30	6.6
KZ-05-111200-WS									
KZ-05-111200E-B	6810	<30	35	1	5.6	<0,1	3.7	nd	<1
KZ-05-111200-V									
KZ-05-111200-S	7100	<30	45	1.4	7.6	<0,1	7.4	nd	<1
KZ-06-071200-WD	27600	<30	2.5	0.5	0.056	1.9	<0,1	19	2.9
KZ-06-071200-WS									
KZ-06-071200-B	7085	<30	42	<0,1	4.7	<0,1	2.4	nd	<1
KZ-06-071200-V									
KZ-06-071200-S	7800	<30	35	<0,1	5.5	<0,1	2.8	nd	<1
KZ-07-051200-WD	26770	34	<1	0.69	0.063	1.5	<0,1	21	7.2
KZ-07-051200-WS									
KZ-07-051200-B	10857	<30	60	0.67	6.7	<0,1	3.9	nd	<1
KZ-07-051200-V									
KZ-07-051200-S	11280	<30	50	<0,1	6.2	<0,1	3.5	nd	2.4
KZ-08-041200-WD	51390	68	<1	0.53	0.1	2.4	<0,1	23	7.9
KZ-08-041200-WS									
KZ-08-041200-B	11080	<30	29	0.87	5.7	<0,1	2.7	nd	<1
KZ-08-041200-V									
KZ-08-041200-S	14790	<30	48	<0,1	8	<0,1	4.9	nd	<1
KZ-09-031200-WD	49070	130	<1	0.6	0.068	1.7	<0,1	30	13
KZ-09-031200-WS									
KZ-09-031200-B	11680	<30	43	1.4	4.6	<0,1	3.4	nd	<1

Provisional Data**Analysis performed by Uzbekistan Institute of Nuclear Physics**

Sample ID	Na	Ni	Rb	Sb	Sc	Se	Th	Zn	U
KZ-09-031200-V									
KZ-09-031200-S	10880	<30	36	1	7.4	<0,1	4.6	nd	<1
KZ-10-031200-WD	49130	159	<1	0.63	0.14	<1	<0,1	38	7.4
KZ-10-031200-WS									
KZ-10-031200-B	11595	<30	34	<0,1	6.8	<0,1	3.7	nd	<1
KZ-10-031200-V									
KZ-10-031200-S	14390	<30	<10	2	6.8	<0,1	3.7	nd	<1
KZ-11-021200-WD	44870	<30	<1	0.9	0.15	2.8	<0,1	<10	16
KZ-11-021200-WS									
KZ-11-021200-B	9620	<30	63	<0,1	7.2	<0,1	3.8	nd	<1
KZ-11-021200-V									
KZ-11-021200-S	16770	<30	55	<0,1	6.9	<0,1	3.9	nd	<1
KZ-12-011200-WD	50115	<30	<1	0.49	0.2	2.2	<0,1	<10	14
KZ-12-011200-WS									
KZ-12-011200-B	12465	<30	41	0.76	5.7	<0,1	2.9	nd	<1
KZ-12-011200-V									
KZ-12-011200-S	11400	<30	<10	3.3	8.1	<0,1	4.3	nd	<1
KZ-13-011200-WD	39680	<30	<1	0.77	0.17	<1	<0,1	34	12
KZ-13-011200-WS									
KZ-13-011200-B	10970	<30	36	<0,1	7.1	<0,1	3.4	nd	<1
KZ-13-011200-V									
KZ-13-011200-S	30840	<30	41	<0,1	6.9	<0,1	2.8	nd	<1
KZ-14-301100-WD	40160	<30	<1	0.94	0.61	2.7	<0,1	<10	12

Provisional Data**Analysis performed by Uzbekistan Institute of Nuclear Physics**

Sample ID	Na	Ni	Rb	Sb	Sc	Se	Th	Zn	U
KZ-14-301100-WS									
KZ-14-301100-B	10470	<30	32	<0,1	5.6	<0,1	3	nd	<1
KZ-14-301100-V									
KZ-14-301100-S	16935	<30	21	<0,1	5.9	<0,1	3.1	nd	<1
KZ-15-291100-WD	50000	<30	<1	0.73	0.87	1.8	<0,1	<10	12
KZ-15-291100-WS									
KZ-15-291100-B	3772	<30	20	0.3	2.1	<0,1	1.4	nd	<1
KZ-15-291100-V									
KZ-15-291100-S	6960	<30	42	<0,1	6.3	<0,1	3	nd	<1

B.2.5 Kazakhstan Basic Water Quality, Spring 2001

Sample ID	Water Temp. (deg C)	Dissolved Oxygen (% saturation)	Dissolved Oxygen (mg/L)	Specific Conductivity (μ S/cm)	Salinity (g/L)	TDS (g/L)	Depth (m)	pH	Redox Potential (mV)
KZ-01-13062001	25.62	105.8	8.31	2209	1.182	1.4134	1.2	7.59	422
KZ-02-13062001	23.58	55.5	4.50	1574	0.836	1.0070	1.0	7.24	411
KZ-03-15062001	20.40	103.9	8.87	2542	1.370	1.6270	0.8	7.81	272
KZ-04-15062001	19.79	100.8	8.74	1818	0.970	1.1638	0.8	7.51	380
KZ-05-15062001	25.94	118.1	9.23	975	0.510	0.6241	0.6	8.13	286
KZ-06-18062001	24.15	134.2	10.76	888	0.464	0.5682	1.0	7.83	336
KZ-07-11062001	24.58	100.0	8.05	1451	0.770	0.9283	1.2	7.72	410
KZ-08-09062001	23.83	99.0	8.08	1448	0.770	0.9274	1.1	7.71	390
KZ-09-09062001	22.53	95.8	8.01	1478	0.784	0.9476	1.0	7.65	379
KZ-10-08062001	21.42	97.1	8.38	1452	0.770	0.9286	1.2	7.57	465
KZ-11-07062001	22.48	91.8	7.80	1427	0.756	0.9130	1.2	7.69	477
KZ-12-06062001	22.57	95.5	8.11	1426	0.752	0.9123	1.2	7.90	396
KZ-13-05062001	22.45	99.3	8.44	1603	0.854	1.0276	1.2	7.93	430
KZ-14-04062001	22.09	105.5	9.00	1611	0.858	1.0318	1.2	7.96	436
KZ-15-03062001	21.42	100.8	8.83	1673	0.890	1.0712	1.4	7.87	419

B.2.6 Kazakhstan Radionuclides, Spring 2001

Sample ID	Beta activity (Bk/kg)	Alpha activity (Bk/kg)	K-40	Tl-208	Bi-212	Pb-212	Bi-214	Pb-214	Ra-226	Ac-228	Th-232	U-235	U-238
KZ-01-130601-WD	0.441	0.328	0.38	0.006	<0,15	0.01	<0,01	<0,01	<0,01	<0,004	<0,01	<0,005	0.13
KZ-01-130601-WS													
KZ-01-130601-B	674.2	716.8	570	19	50	43	34	34	52	40	45	0.35	50
KZ-01-130601-V	254.8	67.7	270	5.1	<1	5.3	7.7	5.6	20	<1	<1	0.05	6.6
KZ-01-130601-S		-											
KZ-02-130601-WD	0.341	0.056	0.31	0.06	<0,15	0.007	<0,01	<0,01	<0,01	0.005	<0,01	<0,005	0.1
KZ-02-130601-WS													
KZ-02-130601-B	527.9	472.1	510		35	26	19	22	26	23	29	0.23	33
KZ-02-130601-V		-											
KZ-02-030601-S	695.2	429.2	500	12	30	40	31	31	50	33	31	0.3	43
KZ-03-150601-WD	0.35	0.258	0.31	<0,03	<0,15	<0,002	<0,01	<0,01	<0,01	0.006	<0,01	<0,005	0.13
KZ-03-150601-WS													
KZ-03-150601-B	660.5	515	600	20	36	41	23	31	47	35	35	0.4	54
KZ-03-150601-V	201.4	25.2	230	0.9	<1	2.2	5.1	2.4	19	<1	<1	0.08	12
KZ-03-150601-S	643.3	600.9	635	44	46	47	28	38	56	35	41	0.46	65
KZ-04-150601-WD	0.274	0.202	0.27	0.04	<0,15	0.002	<0,01	<0,01	0.06	0.004	<0,01	<0,005	0.05
KZ-04-150601-WS													
KZ-04-150601-B	533.8	729.6	520	22	63	42	26	30	40	35	50	0.6	78
KZ-04-150601-V	240.8	189.9	90	10	<1	22	13	19	70	17	15	0.46	66
KZ-04-150601-S	722.5	643.8	560	18	43	44	27	32	37	37	40	0.39	56

Provisional Data

Analysis performed by Uzbekistan Institute of Nuclear Physics

Sample ID	Beta activity (Bk/kg)	Alpha activity (Bk/kg)	K-40	Tl-208	Bi-212	Pb-212	Bi-214	Pb-214	Ra-226	Ac-228	Th-232	U-235	U-238
KZ-05-150601-WD	0.211	0.173	0.21	<0,03	<0,15	<0,002	<0,01	<0,01	<0,01	<0,004	<0,01	0.005	0.02
KZ-05-150601-WS													
KZ-05-150601-B	509.6	613.8	430	15	39	37	27	32	41	31	34	0.3	44
KZ-05-150601-V	229	161.1	120	10	<1	6.4	10	10	25	4.1	<1	<0,03	1.2
KZ-05-150601-S	575.1	815.5	504	14	32	41	31	32	45	30	32	0.43	62
KZ-06-180601-WD	0.136	<0,036	0.12	0.06	<0,15	0.02	0.07	<0,01	0.04	<0,01	<0,005	0.1	
KZ-06-180601-WS													
KZ-06-180601-B	469.4	686.7	390	10	35	34	24	28	42	29	32	0.5	74
KZ-06-180601-V	158.7	95.4	70	8.5	<1	6.2	6.5	7	23	7.6	4	0.11	15
KZ-06-180601-S	484.7	772.6	470	14	43	33	25	30	33	34	39	0.33	47
KZ-07-110601-WD	0.415	0.129	0.39	0.06	<0,15	0.004	0.06	<0,01	<0,01	0.03	<0,01	<0,005	0.14
KZ-07-110601-WS													
KZ-07-110601-B	471.1	313.3	530	12	30	33	21	24	35	25	27	0.3	38
KZ-07-110601-V	197.9	78.9	120	4.4	<1	14	9.3	3.3	34	3.7	<1	0.1	20
KZ-07-110601-S	561.9	600.9	530	9	3.9	4.7	6.6	5.1	44	7.5	6	0.26	37
KZ-08-100601-WD	0.359	0.214	0.33	<0,03	<0,15	0.01	<0,01	<0,01	0.02	<0,01	<0,005	0.11	
KZ-08-100601-WS													
KZ-08-100601-B	629	472.1	500	13	32	33	22	27	55	26	30	0.5	68
KZ-08-100601-V	274.7	17.1	350	<1	<1	0.7	<1	2.7	7.6	<1	<1	0.04	6.4
KZ-08-100601-S	533.5	429.2	505	15	47	40	28	30	51	33	40	0.48	69
KZ-09-090601-WD	0.358	0.341	0.35	0.03	<0,15	<0,002	<0,01	<0,01	0.03	<0,01	<0,005	0.14	
KZ-09-090601-WS													

Provisional Data

Analysis performed by Uzbekistan Institute of Nuclear Physics

Sample ID	Beta activity (Bk/kg)	Alpha activity (Bk/kg)	K-40	Tl-208	Bi-212	Pb-212	Bi-214	Pb-214	Ra-226	Ac-228	Th-232	U-235	U-238
KZ-09-090601-B	595.5	545.1	490	19	38	31	23	26	34	29	32	0.3	43
KZ-09-090601-V	129.2	7.4	160	2	<1	3	1.3	<2	11	<1	<1	<0,03	2
KZ-09-090601-S	649.2	858.4	525	24	45	42	26	34	61	33	30	0.46	66
KZ-10-080601-WD	0.336	0.183	0.32	0.08	<0,15	<0,002	<0,01	<0,01	0.03	<0,004	<0,01	<0,005	0.27
KZ-10-080601-WS													
KZ-10-080601-B	527.8	399.2	508	15	38	36	25	27	56	30	32	0.4	55
KZ-10-080601-V	201.1	8.1	170	2.9	9	1.5	<1	<1	<7	<1	<1	<0,03	<1
KZ-10-080601-S	564.9	686.7	500	20	38	39	28	30	38	<0,6	30	0.48	71
KZ-11-070601-WD	0.275	0.337	0.26	<0,03	<0,15	<0,002	0.04	<0,01	<0,01	0.03	<0,01	<0,005	0.12
KZ-11-070601-WS													
KZ-11-070601-B	575.6	613.8	510	19	66	52	28	35	51	39	49	0.5	66
KZ-11-070601-V	188.8	139.5	150	2.1	<1	6.4	7.4	3.6	63	1.4	<1	0.4	62
KZ-11-070601-S	542.4	343.4	450	19	45	34	25	27	45	28	37	0.55	78
KZ-12-060601-WD	0.325	0.39	0.3	0.07	<0,15	0.02	<0,01	0.002	<0,01	0.03	<0,01	<0,005	0.14
KZ-12-060601-WS													
KZ-12-060601-B	679.3	613.8	560	13	25	26	15	22	33	24	24	0.4	57
KZ-12-060601-V	209.2	33.3	270	<1	<1	5	3	<1	9.1	<1	<1	0.1	18
KZ-12-060601-S	574.6	686.7	516	23	59	42	30	33	37	36	48	0.31	44
KZ-13-050601-WD	0.395	0.253	0.37	0.05	<0,15	0.01	<0,01	<0,01	0.09	0.04	<0,01	<0,005	0.14
KZ-13-050601-WS													
KZ-13-050601-B	585.4	300.4	530	11	31	22	18	20	28	16	22	0.3	38
KZ-13-050601-V	159.9	46.9	150	2.2	<1	4.1	4.1	2.6	15	2.9	<1	0.1	15

Provisional Data**Analysis performed by Uzbekistan Institute of Nuclear Physics**

Sample ID	Beta activity (Bk/kg)	Alpha activity (Bk/kg)	K-40	Tl-208	Bi-212	Pb-212	Bi-214	Pb-214	Ra-226	Ac-228	Th-232	U-235	U-238
KZ-13-050601-S	571.7	772.6	560	26	51	45	34	36	58	36	44	0.42	60
KZ-14-040601-WD	0.416	0.056	0.39	<0.03	<0.15	0.01	<0.01	<0.01	0.06	<0.004	<0.01	<0.005	0.12
KZ-14-040601-WS													
KZ-14-040601-B	589.7	300.4	460	16	37	39	27	30	45	32	33	0.6	90
KZ-14-040601-V	139.6	18.5	125	<1	<1	4.7	7.8	2.5	13	<1	<1	<0.03	6.5
KZ-14-040601-S	504.2	343.4	540	24	43	36	21	30	36	26	34	0.29	42
KZ-15-030601-WD	0.343	0.07	0.32	0.05	0.26	<0.03	<0.01	<0.01	0.15	0.006	<0.01	<0.005	0.09
KZ-15-030601-WS													
KZ-15-030601-B	594	472.1	490	15	33	26	17	23	35	26	30	0.3	37
KZ-15-030601-V	261.9	34.6	300	3.6	<1	4.9	7.7	3.2	32	<1	<1	0.1	15
KZ-15-030601-S	612.1	558	490	24	31	34	29	30	39	29	30	0.49	70

B.2.7 Kazakhstan Metals, Spring 2001
Ag through Mn

Sample ID	Ag	Au	Ba	Br	Ca	Co	Cr	Cu	Cs	Eu	Fe	Hg	K	La	Mn
KZ-01-130601-WD	0.38	<0,01	294	24	121510	0.29	4.6	nd	<0,1	<0,1	209	0.36	<1000	<1	60
KZ-01-130601-WS	<0,1	0.01	660	<0,1	4545	12	38	54	5.3	0.89	23935	<0,01	<100	1.1	67
KZ-01-130601-B	<0,1	0.022	720	<1	76315	17	50	nd	6.1	1.9	29380	nd	21226	38	807
KZ-01-130601-V	2	<0,01	432	69	56380	11	18	950	2.2	0.63	14344	<0,01	57800	24	933
KZ-01-130601-S															
KZ-02-130601-WD	<0,1	<0,01	255	<1	156400	0.22	1.2	nd	<0,1	<0,1	73	<0,01	<1000	<1	39
KZ-02-130601-WS	6.8	0.004	596	0.11	940	9	57	15	3.2	<0,1	20330	<0,01	163	0.16	9
KZ-02-130601-B	<0,1	0.02	850	<1	49280	10	68	nd	3.8	1.7	18355	nd	15440	25	523
KZ-02-130601-V															
KZ-02-030601-S	<0,1	<0,01	728	<1	99530	17	46	nd	6	2.5	29980	nd	17530	48	494
KZ-03-150601-WD	<0,1	<0,01	243	38	140956	0.57	13	nd	<0,1	<0,1	322	<0,01	<1000	<1	44
KZ-03-150601-WS	<0,1	0.014	730	<0,1	19800	11.6	43	124	5.9	1.4	25810	<0,01	3682	7.3	125
KZ-03-150601-B	<0,1	<0,01	720	<1	61540	13	34	nd	5.2	1.9	22670	nd	14970	39	555
KZ-03-150601-V	<0,1	0.035	483	152	57840	10	29	1442	1.6	0.55	12300	<0,01	76600	13	915
KZ-03-150601-S	<0,1	<0,01	1215	<1	72670	14	45	nd	5.9	2.7	29000	nd	19047	50	473
KZ-04-150601-WD	0.45	0.18	240	<1	155630	0.45	7.4	nd	<0,1	<0,1	251	0.41	<1000	<1	60
KZ-04-150601-WS	<0,1	0.0043	653	<0,1	5130	13	54	52	5.2	1.5	29637	<0,01	670	1.6	32
KZ-04-150601-B	<0,1	<0,01	680	<1	56000	11	47	nd	6.3	2.2	19280	nd	16080	38	535
KZ-04-150601-V	<0,1	<0,01	576	145	157790	11.8	17.6	1076	3.8	0.46	18600	<0,01	15950	22	1650
KZ-04-150601-S	<0,1	0.047	1340	<1	74640	19	67	nd	9.1	2.9	33778	nd	21600	53	647

Sample ID	Ag	Au	Ba	Br	Ca	Co	Cr	Cu	Cs	Eu	Fe	Hg	K	La	Mn
KZ-05-150601-WD	0.25	0.06	127	<1	48468	0.38	2.8	nd	<0.1	<0.1	290	0.076	<1000	1.9	26
KZ-05-150601-WS	<0.1	0.01	486	0.35	880	8.8	39	20	3.5	<0.1	18585	<0.01	680	1.1	24
KZ-05-150601-B	<0.1	<0.01	560	<1	100000	14	41	nd	6.5	2.1	23600	nd	16353	32	692
KZ-05-150601-V	<0.1	0.026	550	56	203070	7.6	33.6	545	1.9	0.68	11880	<0.01	<1000	12	1013
KZ-05-150601-S	<0.1	0.045	710	9	90710	19	57	nd	8.9	2.6	33490	nd	20750	45	620
KZ-06-180601-WD	<0.1	0.048	121	13	35870	0.46	3	nd	<0.1	<0.1	90	0.16	17640	<1	26
KZ-06-180601-WS	<0.1	0.011	666	0.43	8105	10	28	43	6.1	1.6	22876	<0.01	1240	2.4	47
KZ-06-180601-B	<0.1	<0.01	700	<1	123400	14	95	nd	4.6	2.2	23620	nd	11474	40	570
KZ-06-180601-V	<0.1	<0.01	680	59	271000	7.5	17.4	896	1.1	<0.1	8753	<0.01	17235	9.1	1182
KZ-06-180601-S	<0.1	<0.01	780	<1	109710	12	54	nd	5	2.3	23580	nd	17417	39	464
KZ-07-110601-WD	<0.1	<0.01	172	27	173510	1.6	1.4	nd	<0.1	<0.1	214	<0.01	<1000	<1	<1
KZ-07-110601-WS	5	0.006	924	0.26	1905	9.4	74	17	5.9	0.85	22370	<0.01	240	0.4	9
KZ-07-110601-B	<0.1	<0.01	800	<1	85700	16	114	nd	2.4	2.2	23595	nd	15780	36	477
KZ-07-110601-V	<0.1	<0.01	352	48	102555	7.2	16.8	976	2.1	0.55	14950	<0.01	28140	18	438
KZ-07-110601-S	<0.1	0.023	800	<1	93820	26	53	nd	2	2	26646	nd	16783	35	496
KZ-08-100601-WD	<0.1	<0.01	206	<1	110525	0.2	1.9	nd	<0.1	<0.1	117	<0.01	17256	<1	33
KZ-08-100601-WS	<0.1	0.014	<100	1	15290	11	33	69	4.4	1.7	15065	<0.01	1974	3.7	69
KZ-08-100601-B	<0.1	<0.01	610	<1	78290	15	60	nd	6.4	2.8	23900	nd	15120	40	480
KZ-08-100601-V	1.3	0.036	158	54	59874	1.1	<1	768	<0.1	<0.1	1850	<0.01	110677	3.3	564
KZ-08-100601-S	<0.1	0.92	610	<1	115336	19	68	nd	7.5	2.2	30030	nd	13560	43	587
KZ-09-090601-WD	<0.1	<0.01	174	<1	68690	0.16	2.2	nd	<0.1	<0.1	160	<0.01	18676	2.6	26
KZ-09-090601-WS	<0.1	0.016	840	<0.1	12240	10.6	37	115	6.3	1.2	22422	<0.01	2463	4.5	87

Provisional Data

Analysis performed by Uzbekistan Institute of Nuclear Physics

Sample ID	Ag	Au	Ba	Br	Ca	Co	Cr	Cu	Cs	Eu	Fe	Hg	K	La	Mn
KZ-09-090601-B	<0,1	<0,01	410	<1	65360	14	62	nd	5.8	2.1	22450	nd	15770	34	500
KZ-09-090601-V	2.2	<0,01	363	45	62400	4.1	18.5	486	1.4	<0,1	9562	<0,01	65315	16	470
KZ-09-090601-S	<0,1	<0,01	610	<1	85910	21	48	nd	<1	2.1	32430	nd	17800	44	595
KZ-10-080601-WD	<0,1	0.11	200	<1	107510	0.16	2.2	nd	<0,1	<0,1	148	<0,01	<1000	<1	30
KZ-10-080601-WS	<0,1	0.011	1160	1.4	14366	11.4	48	80	5.8	1.3	24340	<0,01	<100	5.7	96
KZ-10-080601-B	<0,1	<0,01	617	<1	83520	13.6	53	nd	5.8	2.4	23980	nd	15320	37	540
KZ-10-080601-V	<0,1	0.038	400	76	45626	1.3	2.4	674	0.48	<0,1	2048	<0,01	70690	2.7	1200
KZ-10-080601-S	<0,1	0.019	660	<1	88340	10	66	nd	5.5	2.1	26690	nd	17170	30	461
KZ-11-070601-WD	<0,1	<0,01	180	<1	70830	0.24	1.8	nd	<0,1	<0,1	94	<0,01	<1000	<1	16
KZ-11-070601-WS	<0,1	0.014	1074	<0,1	23466	12.3	49	95	5.8	1.4	27910	<0,01	<100	5.9	104
KZ-11-070601-B	<0,1	<0,01	920	<1	91430	17	64	nd	7.7	2	30835	nd	12060	39	785
KZ-11-070601-V	<0,1	<0,01	85	127	71390	10	28	986	3.4	0.73	30889	<0,01	39393	26	856
KZ-11-070601-S	<0,1	<0,01	630	<1	93486	16	70	nd	6.1	1.9	25095	nd	16033	37	500
KZ-12-060601-WD	<0,1	<0,01	220	<1	91480	1	1.6	nd	<0,1	<0,1	234	0.14	<1000	<1	21
KZ-12-060601-WS	<0,1	0.02	1070	<0,1	11042	11.5	47	62	6.4	1.4	26367	<0,01	2340	4.1	66
KZ-12-060601-B	<0,1	<0,01	425	<1	55170	11.5	39	nd	4.6	1.3	18530	nd	16870	28	470
KZ-12-060601-V	<0,1	0.13	416	81	64395	7.3	15	990	2.8	0.58	13536	<0,01	82600	17	667
KZ-12-060601-S	<0,1	<0,01	836	<1	87786	17	48	nd	5.8	2.3	27640	nd	15320	38	556
KZ-13-050601-WD	<0,1	0.074	265	15	101625	0.21	2.9	nd	<0,1	<0,1	<20	0.2	<1000	<1	<1
KZ-13-050601-WS	<0,1	0.005	515	<0,1	8800	11.5	59	58	5.7	4.7	22000	<0,01	1220	2.4	39
KZ-13-050601-B	<0,1	<0,01	636	<1	58735	9.6	32	nd	3.2	1.5	15730	nd	17148	29	380
KZ-13-050601-V	<0,1	0.065	442	84	69625	7.6	27	1055	1.8	0.64	14162	<0,01	63420	18	484
KZ-13-050601-S	<0,1	<0,01	780	<1	91255	19	94	nd	7.1	1.2	34125	nd	22920	42	650

Provisional Data**Analysis performed by Uzbekistan Institute of Nuclear Physics**

Sample ID	Ag	Au	Ba	Br	Ca	Co	Cr	Cu	Cs	Eu	Fe	Hg	K	La	Mn
KZ-14-040601-WD	0.41	0.065	234	<1	99680	0.38	1.3	nd	<0,1	<0,1	143	<0,01	<1000	<1	30
KZ-14-040601-WS	<0,1	0.014	1028	0.44	2690	11.4	34	53	4.6	1.1	22140	<0,01	780	0.73	18
KZ-14-040601-B	<0,1	<0,01	540	<1	71100	13.7	28	nd	4.4	1.7	23090	nd	15600	30	585
KZ-14-040601-V	<0,1	0.051	450	135	137756	6.4	13.6	1190	0.93	<0,1	7232	<0,01	40116	7.4	1200
KZ-14-040601-S	<0,1	<0,01	740	<1	51934	9.7	28	nd	3.3	<1	13755	nd	10990	20	415
KZ-15-030601-WD	<0,1	1.1	275	14	128720	0.39	1	nd	<0,1	<0,1	125	0.21	<1000	<1	45
KZ-15-030601-WS	<0,1	0.0046	772	0.29	4056	12.8	55	46	7	1.1	22330	<0,01	<100	0.7	37
KZ-15-030601-B	<0,1	<0,01	540	<1	71160	12.6	33		4.1	1.6	18247	nd	17950	32	487
KZ-15-030601-V	<0,1	0.06	580	97	98500	10	15	1485	3.7	0.65	17234	<0,01	82743	20	510
KZ-15-030601-S	<0,1	<0,01	<100	<1	31617	7.1	25	nd	3.7	<1	13000	nd	16240	18	451

B.2.8 Kazakhstan Metals, Spring 2001
Na through U

Sample ID	Na	Ni	Rb	Sb	Sc	Se	Th	Zn	U
KZ-01-130601-WD	145450	209	<1	0.51	0.038	3.4	<0,01	38	14.8
KZ-01-130601-WS	998	<30	61	0.59	8.5	<0,1	6.6	nd	0.17
KZ-01-130601-B	9700	<30	145	2.9	11	<0,1	11.6	nd	2.8
KZ-01-130601-V	15672	<30	33	0.55	5.1	<0,1	5.8	52	5.5
KZ-01-130601-S									
KZ-02-130601-WD	99130	<30	<1	0.39	0.018	2.2	<0,01	6.5	11
KZ-02-130601-WS	363	<30	46	1.6	7.6	<0,1	4.5	nd	0.03
KZ-02-130601-B	11077	<30	100	<1	5.9	<0,1	7.1	nd	<1
KZ-02-130601-V									
KZ-02-030601-S	10300	<30	137	4.3	13	<0,1	14.2	nd	<1
KZ-03-150601-WD	268437	745	<1	0.44	0.052	6.8	<0,01	22	<1
KZ-03-150601-WS	3486	<30	48	0.64	10.6	<0,1	6.9	nd	1.9
KZ-03-150601-B	10550	<30	175	1.7	8	<0,1	10.5	nd	2.7
KZ-03-150601-V	26286	<30	38	0.92	3.4	<0,1	3.7	91	<1
KZ-03-150601-S	10840	<30	166	2.4	12	<0,1	15.5	nd	5.5
KZ-04-150601-WD	11900	<30	<1	0.27	0.038	2.8	<0,01	<1	<1
KZ-04-150601-WS	932	<30	92	1.6	11.5	<0,1	7.3	nd	0.013
KZ-04-150601-B	10486	<30	62	<1	7.8	<0,1	10	nd	3.9
KZ-04-150601-V	5590	<30	47	1.3	7.2	<0,1	5.2	<10	6.6
KZ-04-150601-S	9123	<30	112	3.9	12	<0,1	17.5	nd	3.3

Sample ID	Na	Ni	Rb	Sb	Sc	Se	Th	Zn	U
KZ-05-150601-WD	55272	<30	<1	0.42	0.047	1.8	<0,01	<1	5.5
KZ-05-150601-WS	525	<30	35	1.3	7.5	<0,1	5.3	nd	0.19
KZ-05-150601-B	6230	<30	74	5	8.5	<0,1	8.5	nd	2.7
KZ-05-150601-V	3400	<30	27	0.91	3.6	<0,1	3.8	51	3.3
KZ-05-150601-S	6627	<30	120	4.7	12	<0,1	12.6	nd	3.5
KZ-06-180601-WD	41035	<30	<1	0.2	0.028	1.8	<0,01	144	4
KZ-06-180601-WS	914	<30	51	<0,1	9.3	<0,1	6.2	nd	0.18
KZ-06-180601-B	7566	<30	86	3.4	8.4	<0,1	10.5	nd	4.9
KZ-06-180601-V	8655	<30	10	0.47	2.6	6.2	1.7	<10	6.1
KZ-06-180601-S	7213	<30	84	4.5	8	<0,1	9	nd	3.6
KZ-07-110601-WD	108620	4650	<1	0.6	0.031	1.5	<0,01	7	12.3
KZ-07-110601-WS	273	350	38	<0,1	8.4	<0,1	7.2	nd	0.06
KZ-07-110601-B	10380	<30	100	<1	8.3	<0,1	8.1	nd	<1
KZ-07-110601-V	31955	275	26	0.51	4.7	3.3	4.5	<10	21
KZ-07-110601-S	11967	<30	103	4.7	10	<0,1	10.5	nd	3.5
KZ-08-100601-WD	95560	85	<1	0.32	0.021	2.1	0.082	6.8	8.6
KZ-08-100601-WS	1564	<30	63	<0,1	9.4	<0,1	7.7	nd	0.4
KZ-08-100601-B	9730	<30	90	<1	9.3	<0,1	10.6	nd	<1
KZ-08-100601-V	10264	<30	27	0.71	0.59	<0,1	0.6	222	<1
KZ-08-100601-S	11563	<30	77	3.3	11	<0,1	11.5	nd	2.6
KZ-09-090601-WD	100480	<30	<1	0.48	0.031	2.4	<0,01	10	4.8
KZ-09-090601-WS	2263	386	35	<0,1	9.3	0.85	7.8	nd	0.57
KZ-09-090601-B	9875	<30	85	<1	8.3	<0,1	7.4	nd	<1

Sample ID	Na	Ni	Rb	Sb	Sc	Se	Th	Zn	U
KZ-09-090601-V	15544	<30	22	0.74	3.4	<0,1	4.4	110	5.2
KZ-09-090601-S	12440	<30	100	2.9	12	<0,1	11.5	nd	4.9
KZ-10-080601-WD	944125	<30	<1	0.4	0.045	2.7	<0,01	8.3	22
KZ-10-080601-WS	1740	458	56	<0,1	10.6	<0,1	9.7	nd	1
KZ-10-080601-B	9990	<30	86	<1	9.2	11	8.1	nd	4.6
KZ-10-080601-V	8351	<30	30	0.51	0.62	<0,1	0.51	103	<1
KZ-10-080601-S	10588	<30	115	7.9	9.8	4.4	9.5	nd	4.7
KZ-11-070601-WD	95547	<30	<1	0.47	0.015	1.1	<0,01	11	12
KZ-11-070601-WS	1752	<100	50	0.71	10.8	<0,1	9.8	nd	0.66
KZ-11-070601-B	7925	<30	90	<1	12	<0,1	10	nd	<1
KZ-11-070601-V	19540	<30	35	<0,1	5.6	6.7	5.1	43	39
KZ-11-070601-S	15188	<30	87	7.1	10	<0,1	8	nd	4.2
KZ-12-060601-WD	79790	<30	<1	0.62	0.028	2	<0,01	12	9.1
KZ-12-060601-WS	1140	<30	44	<0,1	10.5	<0,1	9	nd	0.35
KZ-12-060601-B	10460	<30	88	<1	7.3	<0,1	6.3	nd	1.7
KZ-12-060601-V	16336	<30	21	1.6	4.2	4.2	4	112	6.6
KZ-12-060601-S	10530	<30	146	6.8	11	<0,1	10.5	nd	<1
KZ-13-050601-WD	92529	<30	<1	0.53	0.015	1.8	<0,01	19	12.6
KZ-13-050601-WS	1076	<30	49	<0,1	8.4	<0,1	8.7	nd	0.29
KZ-13-050601-B	11175	<30	100	<1	6.1	<0,1	6.6	nd	<1
KZ-13-050601-V	28940	<30	21	0.93	4.3	<0,1	4.1	74	11
KZ-13-050601-S	13310	<30	81	10	13	<0,1	13.5	nd	2.8
KZ-14-040601-WD	94900	<30	<1	0.6	0.01	1.8	<0,01	16	16.6

Provisional Data**Analysis performed by Uzbekistan Institute of Nuclear Physics**

Sample ID	Na	Ni	Rb	Sb	Sc	Se	Th	Zn	U
KZ-14-040601-WS	1100	<30	27	0.36	3.9	<0,1	6,6	nd	0.13
KZ-14-040601-B	8048	<30	69	4.2	9.2	<0,1	7.5	nd	<1
KZ-14-040601-V	26895	<30	13	0.26	1.6	<0,1	1.2	138	3.8
KZ-14-040601-S	13224	<30	58	<1	5.4	<0,1	5	nd	<1
KZ-15-030601-WD	97946	<30	<1	0.64	0.038	2	<0,01	12	12.5
KZ-15-030601-WS	988	<30	40	<0,1	8.6	<0,1	1.7	nd	0.15
KZ-15-030601-B	10017	<30	84	<1	7.2	9	6.1		<1
KZ-15-030601-V	36144	<30	36	<0,1	5.6	3.9	4.7	55	16
KZ-15-030601-S	9930	<30	56	<1	4.6	<0,1	4	nd	<1

B.2.9 Kyrgyzstan Basic Water Quality, Fall 2000

Sample ID	Dis-charge (m ^{3/s})	Water Temp. (deg C)	Dissolved Oxygen (% saturation)	Dissolved Oxygen (mg/L)	Specific Conductivity (µS/cm)	Salinity (g/L)	TDS (g/L)	Depth (m)	pH	Redox Potential (mV)
KG-01-22.12.00-WD		0.19		15.00	360	0.17	0.222		7	453
KG-02-22.12.00-WD		0.20		15.01	383.2	0.18	0.223	2.5	7.01	430
KG-03-22.12.00-WD	37.2	0.2		15.09	347.4	0.17	0.222	3	7.01	420
KG-04-22.12.00-WD		0.53		15.17	384.9	0.19	0.256		7.19	463
KG-05-22.12.00-WD		0.04		15	397.5	0.2	0.254	3	7.21	468
KG-06-17.01.01-WD		1.66		16.87	153.5	0.07	0.098	0.5	7.28	430
KG-07-17.01.01-WD		0.18		18.96	519.2	0.26	0.332	2	7.41	395
KG-08-17.01.01-WD		7.54		14.02	365	0.18	0.234		7.36	403
KG-09-16.01.01-WD		7.01		14.01	358.2	0.18	0.229		7.52	357
KG-10-16.01.01-WD		6.45		12.77	360	0.18	0.231		7.57	360
KG-11-16.01.01-WD		0.83		17.4	403.6	0.2	0.258		7.47	357
KG-12-14.01.01-WD		4.06		16.64	404.7	0.2	0.259	1	7.57	365
KG-13-14.01.01-WD		2.69		16.8	386.5	0.19	0.247	0.8	7.47	248
KG-14-14.01.01-WD		3.16		16	346.6	0.17	0.222	0.5	7.43	400
KG-15-14.01.01-WD		1.34		16.6	283.6	0.11	0.153	0.5	7.29	360

B.2.10 Kyrgyzstan Radionuclides, Fall 2000

Sample ID	Beta activity (Bk/kg)	Alpha activity (Bk/kg)	K-40	Tl-208	Bi-212	Pb-212	Bi-214	Pb-214	Ra-226	Ac-228	Th-232	U-235	U-238
KG-01-221200-WD	0.077	0.168	0.07	0.004	<0,01	<0,01	0.03	-	-	-	<0,01	<0,01	0.029
KG-01-221200-WS													
KG-01-221200-B	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
KG-01-221200-V													
KG-01-221200-S	910	376.3	654.2	47.6	58.4	58.4	34.2	36.6	63.1	50	41.4	2.7	36.2
KG-02-221200-WD	0.052	0.05	0.09	<0,01	<0,01	<0,01	0.02	-	-	<0,01	<0,01	0.013	
KG-02-221200-WS													
KG-02-221200-B	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
KG-02-221200-V													
KG-02-221200S	699.5	321	636.3	31.8	42.8	40.9	18.8	20.8	47.6	34.2	30.1	2	21.3
KG-03-221200-WD	0.021	0.019	0.023	<0,01	<0,01	<0,01	0.001	-	-	0.006	0.03	<0,01	<0,01
KG-03-221200-WS													
KG-03-221200-B	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
KG-03-221200-V													
KG-03221200-S	666.6	334.4	567	38.7	52.5	45.5	24.3	22.4	52.5	39.3	31.2	2.2	26
KG-04-221200-WD	0.016	0.039	0.023	0.02	<0,01	<0,01	0.001	-	-	0.002	0.018	<0,01	<0,01
KG-04-221200-WS													
KG-04-221200-B	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
KG-04-221200-V													
KG-04-221200-S	305.7	314.8	291.8	18.8	23.7	23.7	17.2	19.8	30.3	21.2	18.4	1.3	20.1

Provisional Data

Analysis performed by Uzbekistan Institute of Nuclear Physics

Sample ID	Beta activity (Bk/kg)	Alpha activity (Bk/kg)	K-40	Tl-208	Bi-212	Pb-212	Bi-214	Pb-214	Ra-226	Ac-228	Th-232	U-235	U-238
KG-05-221200-WD	0.017	<0,015	0.012	0.011	<0,01	<0,01	0.004	-	-	0.009	<0,01	<0,01	<0,01
KG-05-221200-WS													
KG-05-221200-B	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
KG-05-221200-V													
KG-05-221200-S	702.8	353.4	501	33.1	39.2	43.2	24.8	26.6	50.2	32.4	30.1	2.1	26.1
KG-06-170101-WD	0.031	0.0157	0.093	<0,01	<0,01	<0,01	0.003	-	-	-	<0,01	<0,01	<0,01
KG-06-170101-WS													
KG-06-170101-B	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
KG-06-170101-V													
KG-06-170101-S	1098.8	752.6	911.2	58.2	73.3	70.7	22	27	53	58.5	47.1	2.2	24.2
KG-07-170101-WD	0.136	0.057	0.093	<0,01	<0,01	<0,01	0.005	-	-	0.008	<0,01	<0,01	<0,01
KG-07-170101-WS													
KG-07-170101-B	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
KG-07-170101-V													
KG-07-170101-S	672.1	957.7	533.6	40.9	41.6	46.6	23.7	29.4	59.1	39.7	34.3	2.2	29.7
KG-08-170101-WD	0.067	0.04	0.023	0.04	<0,01	<0,01	0.002	-	-	-	<0,01		
KG-08-170101-WS													
KG-08-170101-B	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
KG-08-170101-V													
KG-08-170101-S	713.5	417.8	723.5	33	42.9	37.5	24.3	27.8	47.6	33.6	27.4	2	29.1
KG-09-160101-WD	0.066	0.073	0.023	<0,01	<0,01	<0,01	-	-	-	<0,01	<0,01	<0,01	
KG-09-160101-WS													

Provisional Data

Analysis performed by Uzbekistan Institute of Nuclear Physics

Sample ID	Beta activity (Bk/kg)	Alpha activity (Bk/kg)	K-40	Tl-208	Bi-212	Pb-212	Bi-214	Pb-214	Ra-226	Ac-228	Th-232	U-235	U-238
KG-09-160101-B	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
KG-09-160101-V													
KG-09-160101-S	853	443.5	725.4	38.5	42.9	49	30.2	37.5	63.7	42.4	37.2	2.7	31.5
KG-10-160101-WD	0.055	0.126	0.023	0.024	<0.01	<0.01	-	-	-	0.001	0.031	<0.01	0.042
KG-10-160101-WS													
KG-10-160101-B	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
KG-10-160101-V													
KG-10-160101-S	485.1	327.1	368.1	34.3	35.2	35.2	27.7	30	54.7	33	27.2	2.3	31.3
KG-11-160101-WD	0.094	0.024	0.047	0.04	<0.01	<0.01	0.006	-	-	0.002	0.03	<0.01	0.04
KG-11-160101-WS													
KG-11-160101-B	417.5	253.2	424.1	19.9	20.8	22.4	17	19.7	34.9	20	15.1	1.5	20.1
KG-11-160101-V													
KG-11-160101-S	546.5	333.3	484.7	21.9	<0.01	21.9	31.9	32	59.8	22.1	18.2	2.5	35
KG-12-140101-WD	0.061	0.021	0.023	0.02	<0.01	<0.01	0.003	-	-	0.006	0.011	<0.01	0.0021
KG-12-140101-D													
KG-12-140101-B	478.5	367.7	539	22.5	20.8	27.9	22.2	23.5	45.3	22	18.2	1.9	31.1
KG-12-140101-V													
KG-12-140101-S	517.6	277.5	435.2	18.8	<0.01	23.7	19.3	21.5	51.9	21	15.4	2.2	24.2
KG-13-140101-WD	0.077	<0.015	0.14	<0.01	<0.01	-	0.009	-	-	0.014	<0.01	<0.01	<0.01
KG-13-140101-WS													
KG-13-140101-B	548.5	247.5	488.7	14.2	27.1	32.3	15	16.7	32.7	13.3	9.6	1.4	18.2
KG-13-140101-V													

Provisional Data**Analysis performed by Uzbekistan Institute of Nuclear Physics**

Sample ID	Beta activity (Bk/kg)	Alpha activity (Bk/kg)	K-40	Tl-208	Bi-212	Pb-212	Bi-214	Pb-214	Ra-226	Ac-228	Th-232	U-235	U-238
KG-13-140101-S	650.9	336.2	608.5	26.2	<0,01	26.3	15.1	21	37.5	25.3	18.1	1.6	18.1
KG-14-140101-WD	0.015	<0,015	0.07	<0,01	<0,01	<0,01	0.019	-	-	-	<0,01	<0,01	0.018
KG-14-140101-WS													
KG-14-140101-B	607.7	304.7	591	21.6	25.5	27.5	19.1	22.7	31.9	25.4	19.3	1.4	21.2
KG-14-140101-V													
KG-14-140101-S	709.6	302	558	32.5	32.8	34.4	22	29.5	53.1	34.7	30.1	2.3	26.1
KG-15-140101-WD	0.017	<0,015	0.047	<0,01	<0,01	<0,01	0.015	-	-	0.046	<0,01	<0,01	<0,01
KG-15-140101-WS													
KG-15-140101-B	348.7	90.1	359.8	17.4	<0,01	16.4	8.6	12	21.9	14	9.1	0.9	10.2
KG-15-140101-V													
KG-15-140101-S	606.1	303.3	507.4	25.3	35.2	29.2	15.7	21	47.5	25	19.1	2	18.2

B.2.11 Kyrgyzstan Metals, Fall 2000
Ag through Mn

Sample ID	Au	Ba	Br	Ca	Co	Cr	Cu	Fe	K	La	Mn
KG-01-221200-WD	<0,001	nd	<1	17557	1.3	<1	nd	143	nd	<0,1	nd
KG-01-221200-WS											
KG-01-221200-B											
KG-01-221200-V											
KG-01-221200-S	<0,001	310	<1	32000	7.7	7.9	3.4	16160	17500	41	592
KG-02-221200-WD	<0,001	nd	<1	26990	1	2.7	nd	115	nd	0.11	nd
KG-02-221200-WS											
KG-02-221200-B											
KG-02-221200-V											
KG-02-221200-S	<0,001	417	<1	43100	17.6	18	3.1	14935	23500	24	473
KG-03-221200-WD	0.0023	nd	22	19080	0.3	1.8	nd	51	nd	0.13	nd
KG-03-221200-WS											
KG-03-221200-B											
KG-03-221200-V											
KG-03221200-S	<0,001	390	<1	26875	9.3	11	1.4	13650	24900	21	610
KG-04-221200-WD	0.018	nd	<1	18360	2.1	2.2	nd	144	nd	0.3	nd
KG-04-221200-WS											
KG-04-221200-B											
KG-04-221200-V											
KG-04-221200-S	<0,001	<100	<1	37225	8.7	78	1.6	16040	14000	14	610
KG-05-221200-WD	<0,001	nd	<1	16560	2	2.7	nd	110	nd	0.87	nd

Provisional Data**Analysis performed by Uzbekistan Institute of Nuclear Physics**

Sample ID	Au	Ba	Br	Ca	Co	Cr	Cu	Fe	K	La	Mn
KG-05-221200-WS											
KG-05-221200-B											
KG-05-221200-V											
KG-05-221200-S	<0,001	<100	<1	36285	10.7	36	3.4	17860	18500	24	770
KG-06-170101-WD	<0,001	nd	<1	<7000	2.3	<1	nd	95	nd	0.27	nd
KG-06-170101-WS											
KG-06-170101-B											
KG-06-170101-V											
KG-06-170101-S	<0,001	<100	<1	6080	6.4	<1	3.9	18740	41000	33	520
KG-07-170101-WD	<0,001	nd	<1	22370	2.3	5.4	nd	390	nd	<0,1	nd
KG-07-170101-WS											
KG-07-170101-B											
KG-07-170101-V											
KG-07-170101-S	<0,001	340	<1	33150	6.2	6.8	2.7	14900	18200	18	550
KG-08-170101-WD	<0,001	nd	<1	10510	2.1	4.7	nd	140	nd	0.45	nd
KG-08-170101-WS											
KG-08-170101-B											
KG-08-170101-V											
KG-08-170101-S	<0,001	480	<1	35960	21	11	3.1	15780	26500	15.6	663
KG-09-160101-WD	0.032	nd	<1	29840	2.1	2.8	nd	134	nd	<0,1	nd
KG-09-160101-WS											
KG-09-160101-B											
KG-09-160101-V											

Provisional Data

Analysis performed by Uzbekistan Institute of Nuclear Physics

Sample ID	Au	Ba	Br	Ca	Co	Cr	Cu	Fe	K	La	Mn
KG-09-160101-S	<0,001	<100	<1	22220	14.8	44	5.4	19630	25300	25	730
KG-10-160101-WD	<0,001	nd	<1	15770	2.2	7	nd	137	nd	0.31	nd
KG-10-160101-WS											
KG-10-160101-B											
KG-10-160101-V											
KG-10-160101-S	<0,001	290	<1	18500	5.4	38	3.4	9740	13600	20	365
KG-11-160101-WD	<0,001	nd	<1	31550	14	4.5	nd	326	nd	0.52	nd
KG-11-160101-WS											
KG-11-160101-B	<0,001	<100	<1	27770	15	200	<0,1	19640	17600	13	788
KG-11-160101-V											
KG-11-160101-S	<0,001	400	<1	37300	12.4	42	2	17930	18900	27.9	800
KG-12-140101-WD	0.0065	nd	<1	13390	2.2	<1	nd	276	nd	0.77	nd
KG-12-140101-D											
KG-12-140101-B	<0,001	<100	<1	32520	12	142	1.6	16530	19400	15	653
KG-12-140101-V											
KG-12-140101-S	<0,001	490	<1	28580	14.3	119	2.6	19690	12000	11.6	743
KG-13-140101-WD	<0,001	nd	<1	17900	2	<1	nd	155	nd	0.39	nd
KG-13-140101-WS											
KG-13-140101-B	<0,001	<100	<1	25000	16	162	<0,1	17880	13600	11.3	720
KG-13-140101-V											
KG-13-140101-S	<0,001	290	<1	26050	5.6	19	2.4	10140	27000	13.9	394
KG-14-140101-WD	0.0034	nd	<1	20400	0.3	2.9	nd	49	nd	<0,1	nd
KG-14-140101-WS											

Sample ID	Au	Ba	Br	Ca	Co	Cr	Cu	Fe	K	La	Mn
KG-14-140101-B	<0,001	310	<1	39390	11	67	1.9	15000	21600	22.5	558
KG-14-140101-V											
KG-14-140101-S	<0,001	310	<1	22300	11.6	82	3.1	18520	13000	192	648
KG-15-140101-WD	0.0056	nd	<1	7020	19	<1	nd	118	nd	0.17	nd
KG-15-140101-WS											
KG-15-140101-B	<0,001	<100	<1	15360	17	189	<0,1	20400	22900	13	874
KG-15-140101-V											
KG-15-140101-S	<0,001	350	<1	20220	9.2	30	3.1	18380	18500	25.8	820

B.2.12 Kyrgyzstan Metals, Fall 2000

Na through U

Sample ID	Na	Ni	Rb	Sb	Sc	Se	Th	Zn	U
KG-01-221200-WD	nd	nd	nd	<0,1	0.048	<0,1	nd	16	1.5
KG-01-221200-WS									
KG-01-221200-B									
KG-01-221200-V									
KG-01-221200-S	11736	<30	52	<0,5	8.8	<0,1	5.5	nd	<1
KG-02-221200-WD	nd	nd	nd	0.39	0.033	1.3	nd	24	1
KG-02-221200-WS									
KG-02-221200-B									
KG-02-221200-V									
KG-02-221200S	4685	<30	56	<0,5	7.2	<0,1	4.8	nd	1.6
KG-03-221200-WD	nd	nd	0.12	0.035	0.15	nd	7.4	0.56	

Provisional Data**Analysis performed by Uzbekistan Institute of Nuclear Physics**

Sample ID	Na	Ni	Rb	Sb	Sc	Se	Th	Zn	U
KG-03-221200-WS									
KG-03-221200-B									
KG-03-221200-V									
KG-03221200-S	11810	<30	29	<0,5	6.8	<0,1	4.3	nd	<1
KG-04-221200-WD	nd	nd	nd	0.4	0.08	<0,1	nd	14	0.84
KG-04-221200-WS									
KG-04-221200-B									
KG-04-221200-V									
KG-04-221200-S	14610	<30	<20	<0,5	8.5	<0,1	2	nd	<1
KG-05-221200-WD	nd	nd	nd	<0,1	0.024	<0,1	nd	14	0.52
KG-05-221200-WS									
KG-05-221200-B									
KG-05-221200-V									
KG-05-221200-S	12360	<30	37	<0,5	9.9	<0,1	3.8	nd	<1
KG-06-170101-WD	nd	nd	nd	0.44	0.023	<0,1	nd	7	0.95
KG-06-170101-WS									
KG-06-170101-B									
KG-06-170101-V									
KG-06-170101-S	21854	<30	83	<0,5	8.6	<0,1	29	nd	<1
KG-07-170101-WD	nd	nd	nd	<0,1	0.049	<0,1	nd	34	1.4
KG-07-170101-WS									
KG-07-170101-B									
KG-07-170101-V									

Sample ID	Na	Ni	Rb	Sb	Sc	Se	Th	Zn	U
KG-07-170101-S	11155	<30	35	<0,5	7	<0,1	3,5	nd	<1
KG-08-170101-WD	nd	nd	nd	0.56	0.028	1,2	nd	30	<,1
KG-08-170101-WS									
KG-08-170101-B									
KG-08-170101-V									
KG-08-170101-S	8510	<30	50	<0,5	7,5	<0,1	2,9	nd	<1
KG-09-160101-WD	nd	nd	nd	0.59	0.026	<0,1	nd	20	<0,1
KG-09-160101-WS									
KG-09-160101-B									
KG-09-160101-V									
KG-09-160101-S	11290	<30	68	<0,5	13,9	<0,1	4,6	nd	<1
KG-10-160101-WD	nd	nd	nd	0.68	0.033	<0,1	nd	24	1,1
KG-10-160101-WS									
KG-10-160101-B									
KG-10-160101-V									
KG-10-160101-S	5770	<30	33	1,5	9,2	<0,1	3,4	nd	<1
KG-11-160101-WD	nd	nd	nd	0.73	0.056	<0,1	nd	74	4,2
KG-11-160101-WS									
KG-11-160101-B	11386	<30	<10	2,7	16	<0,1	2,1	nd	<1
KG-11-160101-V									
KG-11-160101-S	9180	<30	48	0,89	11,4	<0,1	2,7	nd	<1
KG-12-140101-WD	nd	nd	nd	0,68	0,065	<0,1	nd	7,6	3,3
KG-12-140101-D									

Sample ID	Na	Ni	Rb	Sb	Sc	Se	Th	Zn	U
KG-12-140101-B	8300	<30	30	2.8	11	<0,1	2.4	nd	<1
KG-12-140101-V									
KG-12-140101-S	9940	<30	4·1	<0,5	12.3	<0,1	2.1	nd	<1
KG-13-140101-WD	nd	nd	nd	0.38	0.031	<0,1	nd	21	4.4
KG-13-140101-WS									
KG-13-140101-B	11175	<30	<10	3.1	11	<0,1	1.7	nd	<1
KG-13-140101-V									
KG-13-140101-S	5180	<30	48	1	5.9	<0,1	3.5	nd	<1
KG-14-140101-WD	nd	nd	nd	0.4	0.013	0.2	nd	45	0.39
KG-14-140101-WS									
KG-14-140101-B	8187	<30	57	0.52	8.8	<0,1	3.3	nd	<1
KG-14-140101-V									
KG-14-140101-S	8850	<30	33	<0,5	10.7	<0,1	3.5	nd	<1
KG-15-140101-WD	nd	nd	nd	0.95	0.05	<0,1	nd	20	0.43
KG-15-140101-WS									
KG-15-140101-B	10920	<30	<10	1.8	14	<0,1	2.7	nd	<1
KG-15-140101-V									
KG-15-140101-S	4340	<30	40	4.9	8.3	<0,1	5.1	nd	<1

B.2.13 Kyrgyzstan Basic Water Quality, Spring 2001

Sample ID	Dis-charge (m ³ /s)	Water Temp. (deg C)	Dissolved Oxygen (% saturation)	Dissolved Oxygen (mg/L)	Specific Conductivity (uS/cm)	Salinity (g/L)	TDS (g/L)	Depth (m)	pH	Redox Potential (mV)
KG-01-22.12.00-WD		0.19		15.00	360	0.17	0.222		7	453
KG-02-22.12.00-WD		0.20		15.01	383.2	0.18	0.223	2.5	7.01	430
KG-03-22.12.00-WD	37.2	0.2		15.09	347.4	0.17	0.222	3	7.01	420
KG-04-22.12.00-WD		0.53		15.17	384.9	0.19	0.256		7.19	463
KG-05-22.12.00-WD		0.04		15	397.5	0.2	0.254	3	7.21	468
KG-06-17.01.01-WD		1.66		16.87	153.5	0.07	0.098	0.5	7.28	430
KG-07-17.01.01-WD		0.18		18.96	519.2	0.26	0.332	2	7.41	395
KG-08-17.01.01-WD		7.54		14.02	365	0.18	0.234		7.36	403
KG-09-16.01.01-WD		7.01		14.01	358.2	0.18	0.229		7.52	357
KG-10-16.01.01-WD		6.45		12.77	360	0.18	0.231		7.57	360
KG-11-16.01.01-WD		0.83		17.4	403.6	0.2	0.258		7.47	357
KG-12-14.01.01-WD		4.06		16.64	404.7	0.2	0.259	1	7.57	365
KG-13-14.01.01-WD		2.69		16.8	386.5	0.19	0.247	0.8	7.47	248
KG-14-14.01.01-WD		3.16		16	346.6	0.17	0.222	0.5	7.43	400
KG-15-14.01.01-WD		1.34		16.6	283.6	0.11	0.153	0.5	7.29	360

B.2.14 Kyrgyzstan Radionuclides, Spring 2001

Sample ID	Beta activity (Bk/kg)	Alpha activity (Bk/kg)	K-40	Tl-208	Bi-212	Pb-212	Bi-214	Pb-214	Ra-226	Ac-228	Th-232	U-235	U-238
KG-01-120501-WD	0.219	0.019	0.2	nd	nd	nd							
KG-01-120501-WS													
KG-01-120501-B													
KG-01-120501-V													
KG-01-120501-S	780.6	686.7	671	19	62	54	32	38	44	43	52	0.5	95
KG-02-120501-WD	0.109	0.021	0.3	nd	nd	nd	nd	nd	0.02	nd	nd	nd	nd
KG-02-120501-WS													
KG-02-120501-B													
KG-02-120501-V													
KG-02-120501-S	607.3	545	525	16	33	34	20	22	32	27	30	0.4	67
KG-03-120501-WD	0.072	0.011	0.07	nd	nd	nd	nd	nd	0.01	nd	nd	nd	nd
KG-03-120501-WS													
KG-03-120501-B													
KG-03-120501-V													
KG-03-120501-S	700.6	759.7	546	20	64	68	46	51	72	49	56	0.6	110
KG-04-110501-WD	0.071	0.025	0.2	nd	nd	nd							
KG-04-110501-WS													
KG-04-110501-B													
KG-04-110501-V													
KG-04-110501-S	459.8	330.5	438	10	29	33	22	22	35	23	26	0.2	47

Provisional Data**Analysis performed by Uzbekistan Institute of Nuclear Physics**

Sample ID	Beta activity (Bk/kg)	Alpha activity (Bk/kg)	K-40	Tl-208	Bi-212	Pb-212	Bi-214	Pb-214	Ra-226	Ac-228	Th-232	U-235	U-238
KG-05-110501-WD	0.087	0.031	0.2	nd	nd	nd							
KG-05-110501-WS													
KG-05-110501-B													
KG-05-110501-V													
KG-05-110501-S	566.7	502.2	525	18	39	39	24	28	38	28	34	0.3	65
KG-06-050501-WD	0.104	0.006	0.1	nd	nd	nd	nd	nd	nd	0.03	nd	nd	nd
KG-06-050501-WS													
KG-06-050501-B													
KG-06-050501-V													
KG-06-050501-S	850.1	1030.1	907	19	57	61	29	31	47	47	52	0.3	59
KG-07-050501-WD	0.07	0.025	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
KG-07-050501-WS													
KG-07-050501-B													
KG-07-050501-V													
KG-07-050501-S	582.9	472.1	450	11	34	35	23	29	39	25	30	0.2	54
KG-08-050501-WD	0.039	0.022	0.3	nd	nd	nd	0.06	nd	nd	nd	nd	nd	nd
KG-08-050501-WS													
KG-08-050501-B													
KG-08-050501-V													
KG-08-050501-S	828	828.4	670	19	60	55	35	38	51	44	52	0.7	79
KG-09-070501-WD	0.076	0.024	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
KG-09-070501-WS													

Provisional Data**Analysis performed by Uzbekistan Institute of Nuclear Physics**

Sample ID	Beta activity (Bk/kg)	Alpha activity (Bk/kg)	K-40	Tl-208	Bi-212	Pb-212	Bi-214	Pb-214	Ra-226	Ac-228	Th-232	U-235	U-238
KG-09-070501-B													
KG-09-070501-V													
KG-09-070501-S	760.9	570.8	690	25	46	46	33	35	54	33	40	0.6	96
KG-10-070501-WD	0.087	0.047	0.1	nd	nd	nd							
KG-10-070501-WS													
KG-10-070501-B													
KG-10-070501-V													
KG-10-070501-S	395.3	570.8	418	13	27	26	19	21	32	21	24	0.3	45
KG-11-070501-WD	0.101	0.022	0.07	nd	nd	nd							
KG-11-070501-WS													
KG-11-070501-B													
KG-11-070501-V													
KG-11-070501-S	385.9	300.4	445	9	20	16	14	16	26	13	18	0.2	39
KG-12-070501-WD	0.043	0.002	0.6	nd	nd	nd	nd	nd	0.05	nd	nd	nd	nd
KG-12-070501-WS													
KG-12-070501-B													
KG-12-070501-V													
KG-12-070501-S	403.3	373.4	460	10	31	23	18	23	36	19	25	0.2	37
KG-13-070501-WD	0.137	0.019	0.6	nd	nd	nd							
KG-13-070501-WS													
KG-13-070501-B													
KG-13-070501-V													

Provisional Data**Analysis performed by Uzbekistan Institute of Nuclear Physics**

Sample ID	Beta activity (Bk/kg)	Alpha activity (Bk/kg)	K-40	Tl-208	Bi-212	Pb-212	Bi-214	Pb-214	Ra-226	Ac-228	Th-232	U-235	U-238
KG-13-070501-S	618.4	545.1	570	10	27	nd	18	21	26	21	24	0.2	38
KG-14-070501-WD	0.159	0.006	0.7	nd	nd	nd							
KG-14-070501-WS													
KG-14-070501-B													
KG-14-070501-V													
KG-14-070501-S	392.8	588	370	11	24	20	15	19	27	16	20	0.3	54
KG-15-070501-WD	0.269	0.011	0.6	nd	nd	nd							
KG-15-070501-WS													
KG-15-070501-B													
KG-15-070501-V													
KG-15-070501-S	575.9	699.6	460	14	34	28	19	19	35	23	29	0.2	36

B.2.15 Kyrgyzstan Metals, Spring 2001
Ag through Mn

Sample ID	Ag	Au	Ba	Br	Ca	Co	Cr	Cs	Eu	Fe	Hg	K	La	Mn
KG-01-120501-WD	<0,1	0.014	nd	0.85	22290	0.24	1	0.045	<0,01	211	0.046	1400	0.35	12
KG-01-120501-WS														
KG-01-120501-B														
KG-01-120501-V														
KG-01-120501-S	<1	0.057	485	<1	53890	11	11	3.5	1.4	20530	nd	21616	68	623
KG-02-120501-WD	<0,1	0.0085	nd	0.71	21054	0.1	3.5	0.03	<0,01	70	0.063	1570	0.3	1.6
KG-02-120501-WS														
KG-02-120501-B														
KG-02-120501-V														
KG-02-120501-S	<1	0.11	295	<1	76700	8.2	27	2.8	1.2	19580	nd	16730	43	700
KG-03-120501-WD	<0,1	0.1	nd	<0,1	28500	0.15	2	0.045	<0,01	145	0.11	<1000	<0,1	1.8
KG-03-120501-WS														
KG-03-120501-B														
KG-03-120501-V														
KG-03-120501-S	<1	0.046	540	<1	94180	11	7.9	3	1.4	22940	nd	21900	67	665
KG-04-110501-WD	<0,1	0.0084	nd	0.78	19290	0.25	4.3	<0,01	<0,01	449	0.039	1053	0.49	5.9
KG-04-110501-WS														
KG-04-110501-B														

Provisional Data**Analysis performed by Uzbekistan Institute of Nuclear Physics**

Sample ID	Ag	Au	Ba	Br	Ca	Co	Cr	Cs	Eu	Fe	Hg	K	La	Mn
KG-04-110501-V														
KG-04-110501-S	<1	0.11	<100	<1	81200	11	54	3.2	1.3	19945	nd	20170	39	750
KG-05-110501-WD	<0.1	0.0085	nd	0.73	22878	0.13	2.1	0.031	<0.01	131	0.041	1372	<0.1	2.6
KG-05-110501-WS														
KG-05-110501-B														
KG-05-110501-V														
KG-05-110501-S	<1	0.05	<100	<1	56530	9.7	37	3.4	1.1	18030	nd	24460	44	425
KG-06-050501-WD	<0.1	0.0022	nd	0.15	6285	0.046	0.56	<0.01	<0.01	39	0.046	1310	0.11	0.42
KG-06-050501-WS														
KG-06-050501-B														
KG-06-050501-V														
KG-06-050501-S	<1	0.07	410	<1	51480	8.5	<1	3.3	1.6	21510	nd	24316	100	810
KG-07-050501-WD	<0.1	0.0067	nd	1.5	22015	0.065	1.6	<0.01	<0.01	35	0.1	1500	<0.1	<0.1
KG-07-050501-WS														
KG-07-050501-B														
KG-07-050501-V														
KG-07-050501-S	<1	0.025	288	<1	84330	7	24	2.7	0.85	14450	nd	15260	38	492
KG-08-050501-WD	<0.1	0.0083	nd	2.5	18153	0.051	1	<0.01	<0.01	43	0.09	1690	0.17	1.9
KG-08-050501-WS														
KG-08-050501-B														

Provisional Data

Analysis performed by Uzbekistan Institute of Nuclear Physics

Sample ID	Ag	Au	Ba	Br	Ca	Co	Cr	Cs	Eu	Fe	Hg	K	La	Mn
KG-08-050501-V														
KG-08-050501-S	<1	0.065	<200	<1	52600	13	52	5.4	1.3	19680	nd	17415	63	1300
KG-09-070501-WD	<0,1	0.01	nd	<0,1	25046	0.072	2.1	0.032	<0,01	79	0.17	<1000	<0,1	<0,1
KG-09-070501-WS														
KG-09-070501-B														
KG-09-070501-V														
KG-09-070501-S	<1	<0,001	<100	<1	53850	16	42	5.4	0.78	19570	nd	28330	49	790
KG-10-070501-WD	<0,1	0.016	nd	3.7	33500	0.08	1.8	<0,01	<0,01	136	0.14	3910	<0,1	2.7
KG-10-070501-WS														
KG-10-070501-B														
KG-10-070501-V														
KG-10-070501-S	<1	0.055	338	<1	71920	9.2	37	1.9	1.2	15990	nd	18360	35	620
KG-11-070501-WD	<0,1	0.01	nd	2.5	28920	0.22	2.7	<0,01	<0,01	365	0.13	<1000	0.55	3.5
KG-11-070501-WS														
KG-11-070501-B														
KG-11-070501-V														
KG-11-070501-S	<1	0.094	<100	<1	82800	16	200	1.7	0.66	20330	nd	21000	233	1055
KG-12-070501-WD	<0,1	<0,001	nd	1.3	59142	0.1	0.73	0.014	0.011	76	0.023	2837	0.14	3.6
KG-12-070501-WS														
KG-12-070501-B														

Provisional Data**Analysis performed by Uzbekistan Institute of Nuclear Physics**

Sample ID	Ag	Au	Ba	Br	Ca	Co	Cr	Cs	Eu	Fe	Hg	K	La	Mn
KG-12-070501-V														
KG-12-070501-S	<1	0.028	<100	<1	67900	15	240	1.2	1	20110	nd	26685	32	875
KG-13-070501-WD	<0.1	0.0073	nd	0.96	21288	0.11	0.96	<0.01	<0.01	71	0.14	<1000	0.21	2.3
KG-13-070501-WS														
KG-13-070501-B														
KG-13-070501-V														
KG-13-070501-S	<1	0.032	390	<1	51960	7.1	23	3.6	1.1	13440	nd	18540	34	415
KG-14-070501-WD	<0,1	0.0024	nd	0.34	8264	0.025	1	<0,01	<0,01	25	0.017	<1000	<0,1	0.4
KG-14-070501-WS														
KG-14-070501-B														
KG-14-070501-V														
KG-14-070501-S	<1	0.043	<100	<1	50040	12	62	2.1	1.1	18750	nd	21200	32	730
KG-15-070501-WD	2.2	0.011	nd	0.86	31350	0.1	<0,1	0.019	<0,01	85	0.031	1342	<0,1	1.2
KG-15-070501-WS														
KG-15-070501-B														
KG-15-070501-V														
KG-15-070501-S	<1	0.039	367	<1	37550	9.4	155	3.5	1	17770	nd	24630	33	715

B.2.16 Kyrgyzstan Metals, Fall 2000
Na through U

Sample ID	Na	Ni	Rb	Sb	Sc	Se	Th	Zn	U
KG-01-120501-WD	3188	nd	<1	0.18	0.037	0.24	0.11	23	1.2
KG-01-120501-WS									
KG-01-120501-B									
KG-01-120501-V									
KG-01-120501-S	12100	<30	94	1.3	9.4	<0,1	8.7	nd	4.1
KG-02-120501-WD	4790	nd	1.3	0.32	0.014	0.39	<0,01	10	1.3
KG-02-120501-WS									
KG-02-120501-B									
KG-02-120501-V									
KG-02-120501-S	12575	<30	81	1.2	7.8	<0,1	3.7	nd	<0,5
KG-03-120501-WD	4910	nd	1.2	0.19	0.023	0.57	<0,01	<1	2.4
KG-03-120501-WS									
KG-03-120501-B									
KG-03-120501-V									
KG-03-120501-S	10120	<30	73	1.7	9.2	<0,1	6.3	nd	3.4
KG-04-110501-WD	6175	nd	1.6	0.15	0.0086	0.37	0.16	5.5	0.82
KG-04-110501-WS									
KG-04-110501-B									
KG-04-110501-V									
KG-04-110501-S	12490	<30	<10	0.84	10	<0,1	4.5	nd	<0,5

Provisional Data**Analysis performed by Uzbekistan Institute of Nuclear Physics**

Sample ID	Na	Ni	Rb	Sb	Sc	Se	Th	Zn	U
KG-05-110501-WD	8187	nd	1.3	0.23	0.036	0.62	0.054	11	1.3
KG-05-110501-WS									
KG-05-110501-B									
KG-05-110501-V									
KG-05-110501-S	11485	<30	27	<0,1	9	<0,1	4.9	nd	4.2
KG-06-050501-WD	703	nd	<1	0.1	0.0073	0.085	0.011	6.2	0.93
KG-06-050501-WS									
KG-06-050501-B									
KG-06-050501-V									
KG-06-050501-S	18187	<30	108	2	10	<0,1	8	nd	2.8
KG-07-050501-WD	10660	nd	1.3	0.21	0.01	0.37	<0,01	8.9	1.9
KG-07-050501-WS									
KG-07-050501-B									
KG-07-050501-V									
KG-07-050501-S	9695	<30	37	<0,1	7	<0,1	2.7	nd	2.4
KG-08-050501-WD	10520	nd	<1	0.17	0.011	0.29	<0,01	nd	1.9
KG-08-050501-WS									
KG-08-050501-B									
KG-08-050501-V									
KG-08-050501-S	11330	<30	57	<0,1	10	<0,1	5.3	nd	5.1
KG-09-070501-WD	12200	nd	<1	0.21	0.028	0.49	0.072	6.5	3.2
KG-09-070501-WS									
KG-09-070501-B									

Sample ID	Na	Ni	Rb	Sb	Sc	Se	Th	Zn	U
KG-09-070501-V									
KG-09-070501-S	10800	<30	32	<0,1	11	<0,1	5.6	nd	3
KG-10-070501-WD	14430	nd	<1	0.2	0.03	0.6	0.05	11	3.1
KG-10-070501-WS									
KG-10-070501-B									
KG-10-070501-V									
KG-10-070501-S	7780	<30	48	1.1	7.7	<0,1	5.3	nd	1.9
KG-11-070501-WD	7440	nd	<1	0.16	0.052	1.1	<0,01	1.4	3.5
KG-11-070501-WS									
KG-11-070501-B									
KG-11-070501-V									
KG-11-070501-S	9965	<30	<10	<0,1	12	<0,1	2.7	nd	2.6
KG-12-070501-WD	11555	nd	<1	0.04	0.01	0.19	0.018	1	5.1
KG-12-070501-WS									
KG-12-070501-B									
KG-12-070501-V									
KG-12-070501-S	11227	<30	<10	0.55	13	<0,1	5.3	nd	2.6
KG-13-070501-WD	5660	nd	<1	0.14	0.016	1.2	<0,01	4	3.8
KG-13-070501-WS									
KG-13-070501-B									
KG-13-070501-V									
KG-13-070501-S	4850	<30	29	0.13	6.6	<0,1	3.1	nd	1
KG-14-070501-WD	1635	nd	<1	0.062	0.0072	0.21	<0,01	1.4	0.26

Sample ID	Na	Ni	Rb	Sb	Sc	Se	Th	Zn	U
KG-14-070501-WS									
KG-14-070501-B									
KG-14-070501-V									
KG-14-070501-S	9320	<30	<10	0.23	11	<0,1	3.5	nd	<0,5
KG-15-070501-WD	3410	nd	<1	0.19	0.031	0.31	<0,01	2.3	0.7
KG-15-070501-WS									
KG-15-070501-B									
KG-15-070501-V									
KG-15-070501-S	3320	<30	32	1.1	8.6	<0,1	4.3	nd	2.1

B.2.17 Tajikistan Radionuclides, Fall 2000

Sample ID	Beta activity (Bk/kg)	Alpha activity (Bk/kg)	K-40	Tl-208	Bi-212	Pb-212	Bi-214	Pb-214	Ra-226	Ac-228	Th-232	U-235	U-238
TJ-01-061100-W/D	0.105	0.0495	0.234	0.039	<0.01	<0.01	0.039	0.011	<0.01	<0.01	<0.01	<0.01	0.2
TJ-01-061100-WS													
TJ-01-061100-B	946.9	746.8	700	75.8	100.6	93.1	56	62	101.1	76.2	70.2	4.3	58.7
TJ-01-061100-V													
TJ-01-061100-S	683.6	360.5	583.4	31.7	43.3	35.8	26	26	53	29	25.1	2.3	30.2
TJ-02-071100-W/D	0.101	0.125	0.234	<0.01	<0.01	<0.01	0.029	0.042	<0.01	0.057	0.031	<0.01	0.032
TJ-02-071100-WS													
TJ-02-071100-B	895.1	540.8	626.3	80.4	111.4	98.1	32.6	37.4	62.4	83.6	80.1	2.7	35.4
TJ-02-071100-V													
TJ-02-071100-S	782.9	618	580.8	53.9	57.3	63.3	36.5	40	73.9	55.3	50.2	3.1	40.1
TJ-03-041100-W/D	0.064	0.0576	0.231	0.039	<0.01	<0.01	0.019	<0.01	<0.01	0.021	0.071	<0.01	0.022
TJ-03-041100-WS													
TJ-03-041100-B	738.9	244.6	775.4	47.7	66.4	52	30.1	31	59.3	47	43.2	2.5	35.4
TJ-03-041100-V													
TJ-03-041100-S	975.9	532.2	708.8	69.1	104.5	81.6	37	39.8	79.2	71.9	67.3	3.4	41.2
TJ-04-101100-W/D	0.154	0.0311	0.934	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.006	<0.01	<0.01	<0.01
TJ-04-101100-WS													

Provisional Data**Analysis performed by Uzbekistan Institute of Nuclear Physics**

Sample ID	Beta activity (Bk/kg)	Alpha activity (Bk/kg)	K-40	Tl-208	Bi-212	Pb-212	Bi-214	Pb-214	Ra-226	Ac-228	Th-232	U-235	U-238
TJ-04-101100-B	999.1	502.2	463.1	43.9	59.7	59.7	33.2	34	60.7	43.3	39.1	2.6	35.7
TJ-04-101100-V													
TJ-04-101100-S	887.1	459.2	625.1	68.2	84.9	84.9	38	43.2	71.4	66.1	59.8	3	43.2
TJ-05-101100-W/D	0.111	0.0985	0.467	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
TJ-05-101100-WS													
TJ-05-101100-B	875.6	532.2	571.8	42.6	67.4	52.6	34.2	33.2	65.6	42	37.4	2.8	36.7
TJ-05-101100-V													
TJ-05-101100-S	969	746.8	642.2	106.7	138.5	120.7	73.9	82.1	138.5	94.1	78.1	5.9	81.2
TJ-06-071100-W/D	0.081	0.0762	0.234	0.026	<0.01	<0.01	0.021	<0.01	<0.01	0.092	0.071	<0.01	0.032
TJ-06-071100-WS													
TJ-06-071100-B	590	416.3	559.8	29.2	35.5	34	22	27	44.3	31.8	29.4	1.9	25.4
TJ-06-071100-V													
TJ-06-071100-S	636.7	472.1	548.7	43.8	<0.01	47.7	28.5	32.9	48.5	36.9	30.7	2.1	32.5
TJ-07-101100-W/D	0.111	0.101	0.234	0.016	<0.01	0.023	0.029	0.062	<0.01	0.04	0.031	<0.01	0.031
TJ-07-101100-WS													
TJ-07-101100-B	375.6	90.1	299.1	24.7	<0.01	29.1	23	25.4	49.3	28	25.4	2.1	28.1
TJ-07-101100-V													
TJ-07-101100-S	439.9	442.1	990.8	30.4	247	30.1	23.8	24	41.8	26.3	21.8	1.8	28.4
TJ-08-DATE-W/D													
TJ-08-DATE-WS													
TJ-08-DATE-B													
TJ-08-DATE-V													

Provisional Data

Analysis performed by Uzbekistan Institute of Nuclear Physics

Sample ID	Beta activity (Bk/kg)	Alpha activity (Bk/kg)	K-40	Tl-208	Bi-212	Pb-212	Bi-214	Pb-214	Ra-226	Ac-228	Th-232	U-235	U-238
TJ-08-DATE-S					247								
TJ-09-141100-WD	0.08	0.0258	2.336	0.156	<0.01	<0.01	0.145	0.062	<0.01	0.229	0.185	<0.01	0.81
TJ-09-141100-WS													
TJ-09-141100-B	475.1	188.8	373.9	29.1	60.6	31.9	23	19.9	39	39.9	34.9	1.7	27.1
TJ-09-141100-V													
TJ-09-141100-S	630.5	442.1	569.9	31.5	46.2	39.8	26.7	28.3	51.7	29.9	24.1	2.2	31.2
TJ-10-141100-WD	0.099	0.0377	0.234	<0.01	<0.01	<0.01	<0.01	0.062	0.027	0.018	0.014	<0.01	<0.01
TJ-10-141100-WS													
TJ-10-141100-B	347.6	360.5	249.5	21.1	<0.01	25.5	18.4	23.2	37.9	23	21.2	1.6	21.4
TJ-10-141100-V													
TJ-10-141100-S	351	489.3	297	26	27.9	31.5	22.9	27.3	47.1	24.5	20.1	2	27.2
TJ-11-141100-WD	0.118	0.0954	0.234	0.039	<0.01	0.205	<0.01	<0.01	0.192	0.309	0.115	0.081	<0.01
TJ-11-141100-WS													
TJ-11-141100-B	430.5	287.6	395.1	28.9	30.7	32.9	23.3	26.4	35.9	25	21.7	1.5	27.2
TJ-11-141100-V													
TJ-11-141100-S	587.4	455	410	36.1	35.2	34.2	24.6	28.7	53.1	32.8	27.9	2.3	29.5
TJ-12-DATE-WD													
TJ-12-DATE-WS													
TJ-12-DATE-B													
TJ-12-DATE-V													
TJ-12-DATE-S													
TJ-13-241100-WD	0.277	0.165	0.234	<0.01	<0.01	0.079	0.039	<0.01	0.056	0.123	0.098	0.019	0.051

Provisional Data**Analysis performed by Uzbekistan Institute of Nuclear Physics**

Sample ID	Beta activity (Bk/kg)	Alpha activity (Bk/kg)	K-40	Tl-208	Bi-212	Pb-212	Bi-214	Pb-214	Ra-226	Ac-228	Th-232	U-235	U-238
TJ-13-241100-WS													
TJ-13-241100-B	526	330.5	492.7	35.9	48.5	44.4	35.2	37	55.3	39.3	34.3	2.3	40.1
TJ-13-241100-V													
TJ-13-241100-S	657.9	300.4	472.4	92.6	53.5	38.3	29.6	34	67.2	33.1	29.7	2.9	32.3
TJ-14-241100-WD	0.289	0.123	2.336	<0,01	<0,01	0.079	0.058	0.042	0.056	0.04	0.019	0.019	0.071
TJ-14-241100-WS													
TJ-14-241100-B	688.9	360.5	510.6	41.8	47	55.4	44.1	50.2	104.7	44.1	37.9	4.4	47.2
TJ-14-241100-V													
TJ-14-241100-S	825.4	485	449.4	71.6	80.2	78.9	45.3	45	87.2	70	65.1	3.7	50.2
TJ-15-251100-WD	0.37	0.0773	0.234	<0,01	<0,01	0.103	0.058	<0,01	<0,01	0.057	0.031	<0,01	0.071
TJ-15-251100-WS													
TJ-15-251100-B	601.3	575.1	446	37.1	41.2	43.9	39.4	42.7	67	38.1	33.6	2.8	42.8
TJ-15-251100-V													
TJ-15-251100-S	713.3	497.9	479.2	38.3	<0,01	41.7	34.9	45.2	75.3	36.7	30.8	3.2	39.2

B.2.18 Tajikistan Metals, Fall 2000
Ag through Mn

Sample ID	Ag	Au	Ba	Br	Ca	Co	Cr	Cu	Cs	Fe	Hg	K	La	Mn
TJ-01-061100-WD	<0,1	0.011	180	<1	38655	0.2	2	nd	<0,01	228	<0,01	nd	0.97	nd
TJ-01-061100-WS														
TJ-01-061100-B	<0,1		347	<1	15100	9.3	<10	nd	3.4	15980	<0,01	27700	34	574
TJ-01-061100-V	<0,1		<50	20	9810	6.2	11	17	2	5750	<0,01	16200	22.6	2410
TJ-01-061100-S	<0,1		250	<1	17540	6.8	29	nd	3.4	13745	<0,01	22000	22	530
TJ-02-071100-WD	<0,1	0.011	<50	1.2	44860	0.14	6.7	nd	0.081	95	<0,01	nd	0.92	nd
TJ-02-071100-WS														
TJ-02-071100-B	<0,1		377	<1	12240	6.2	<10	nd	2.9	14930	<0,01	23800	52.7	373
TJ-02-071100-V														
TJ-02-071100-S	<0,1		<100	<1	25820	4.2	29	nd	3.1	11210	<0,01	24800	20	545
TJ-03-041100-WD	<0,1	0.033	<50	<1	28610	30	3.6	nd	<0,01	400	<0,01	nd	<1	nd
TJ-03-041100-WS														
TJ-03-041100-B	<0,1		425	<1	20740	6.1	<10	nd	2	10970	<0,01	31400	22.1	343
TJ-03-041100-V	<0,1	0.01	28	6.2	4120	0.27	1.3	<5	0.13	185	<0,01	1960	0.82	63
TJ-03-041100-S	<0,1		300	<1	11810	5.4	27	nd	2.3	12680	<0,01	19000	30	440
TJ-04-101100-WD	<0,1	16	<50	<1	340280	5.9	12	nd	<0,01	480	<0,01	nd	<1	nd
TJ-04-101100-WS														
TJ-04-101100-B	<0,1		<100	<1	27710	6.5	31	nd	3.7	13980	<0,01	20900	26.3	536
TJ-04-101100-V	<0,1	0.0014	74	12	6220	0.37	<1	<5	0.1	240	<0,01	58900	0.63	46
TJ-04-101100-S	<0,1		390	<1	19810	4.8	<10	nd	2.3	10550	<0,01	22600	25.1	444
TJ-05-101100-WD	<0,1	0.14	<50	<1	85170	1.7	32	nd	<0,01	260	<0,01	nd	<1	nd

Provisional Data

Analysis performed by Uzbekistan Institute of Nuclear Physics

Sample ID	Ag	Au	Ba	Br	Ca	Co	Cr	Cu	Cs	Fe	Hg	K	La	Mn
TJ-05-101100-WS														
TJ-05-101100-B	<0,1		<100	<1	8880	6.6	<10	nd	3.4	13840	<0,01	26300	22	586
TJ-05-101100-V	<0,1	0.0068	<50	3.7	10340	0.4	1	19	0.06	327	<0,01	11000	0.42	574
TJ-05-101100-S	<0,1		<100	<1	3480	1.1	<10	nd	0.68	3000	<0,01	19500	7.6	406
TJ-06-071100-WD	<0,1	0.019	<50	<1	50400	2.1	9.6	nd	<0,01	168	<0,01	nd	<1	nd
TJ-06-071100-WS														
TJ-06-071100-B	<0,1		360	<1	28800	3.5	12	nd	2.1	8185	<0,01	19400	12.6	480
TJ-06-071100-V														
TJ-06-071100-S	<0,1		<100	<1	16510	6.7	26	nd	2.1	12580	<0,01	20000	21.4	535
TJ-07-101100-WD	0.2	0.09	42	2.5	40740	0.21	2	650	<0,01	246	0.036	nd	0.44	<1
TJ-07-101100-WS														
TJ-07-101100-B	<0,1		<100	<1	41590	5.4	40	nd	<0,1	13500	<0,01	12800	27.7	780
TJ-07-101100-V														
TJ-07-101100-S	<0,1		<100	<1	34770	5.7	21	nd	1.1	12400	<0,01	11000	16.8	620
TJ-08-DATE-WD														
TJ-08-DATE-WS														
TJ-08-DATE-B														
TJ-08-DATE-V														
TJ-08-DATE-S														
TJ-09-141100-WD	<0,2	15	15	<1	370370	0.41	1.5	490	<0,01	183	<0,01	nd	<0,01	<1
TJ-09-141100-WS														
TJ-09-141100-B	<0,1		<100	<1	47650	4.1	12	nd	1.5	8170	<0,01	15400	12.3	446

Provisional Data

Analysis performed by Uzbekistan Institute of Nuclear Physics

Sample ID	Ag	Au	Ba	Br	Ca	Co	Cr	Cu	Cs	Fe	Hg	K	La	Mn
TJ-09-141100-V														
TJ-09-141100-S	<0,1			<100	<1	34125	8.3	22	nd	3.1	15270	<0,01	29000	19.5
TJ-10-141100-WD	0.36		0.03	90	4.5	74790	0.31	7	1630	0.087	342	0.11	nd	<0,01
TJ-10-141100-WS														
TJ-10-141100-B	<0,1			<100	<1	42490	6.9	24	nd	<0,1	13800		15100	16
TJ-10-141100-V														
TJ-10-141100-S	<0,1			330	<1	44880	6.2	18	nd	1.9	13770	<0,01	13000	18.2
TJ-11-141100-WD	0.65		0.04	57	14	160530	0.5	2.2	1000	0.12	400	0.15	nd	<0,01
TJ-11-141100-WS														
TJ-11-141100-B	<0,1			<100	<1	31500	4.5	34	nd	2.2	11100	<0,01	20100	18
TJ-11-141100-V														
TJ-11-141100-S	<0,1			300	<1	28790	5.7	35	nd	2.8	11590	<0,01	19700	20.5
TJ-12-DATE-WD														
TJ-12-DATA-WS														
TJ-12-DATA-B														
TJ-12-DATE-V														
TJ-12-DATA-S														
TJ-13-241100-WD	0.71		0.12	130	5.4	172290	0.14	3.6	790	<0,01	172	<0,01	nd	1.7
TJ-13-241100-WS														
TJ-13-241100-B	<0,1			480	<1	41510	6.6	40	nd	2.8	13480	<0,01	17800	25.2
TJ-13-241100-V	<0,1		0.0051	30	5	3000	0.51	1	<10	0.2	720	<0,01	5100	1
TJ-13-241100-S	<0,1			350	<1	35140	7.1	48	nd	2	11520	<0,01	22300	18.5
TJ-14-241100-WD	0.49			114	4.3	74870	0.25	2.4	920	<0,01	200	0.041	nd	0.72
														<1

Provisional Data**Analysis performed by Uzbekistan Institute of Nuclear Physics**

Sample ID	Ag	Au	Ba	Br	Ca	Co	Cr	Cu	Cs	Fe	Hg	K	La	Mn
TJ-14-241100-WS														
TJ-14-241100-B	<0,1		505	<1	44950	5.8	26	nd	3.4	13830	<0,01	19600	22.7	650
TJ-14-241100-V	<0,1		110	28	25080	3.5	15	<10	1.5	5050	<0,01	7600	4.1	288
TJ-14-241100-S	<0,1		410	<1	25310	6	24	nd	3.1	11860	<0,01	18400	22.4	550
TJ-15-251100-WD	2.1	0.092	118	9	376040	1.1	7.7	1580	<0,01	170	<0,01	nd	<0,2	<1
TJ-15-251100- WS														
TJ-15-251100- B	<0,1		400	<1	38230	5.3	<10	nd	4	12660	<0,01	14000	45.8	464
TJ-15-251100- V														
TJ-15-251100- S	<0,1		530	<1	40540	7.4	28	nd	6.4	14470	<0,01	15000	23	510

B.2.19 Tajikistan Metals, Fall 2000
Na through U

Sample ID	Na	Ni	Rb	Sb	Sc	Se	Th	Zn	U
TJ-01-061100-WD	nd	<30	<1	0.38	0.04	<0,1	<0,1	22	3.1
TJ-01-061100-WS									
TJ-01-061100-B	19120	<30	71	1	8.9	<0,1	21	nd	<1
TJ-01-061100-V	2970	<30	15	0.34	3.7	<0,1	3.6	<10	4.3
TJ-01-061100-S	9560	<30	43	<0,1	8.7	<0,1	4	nd	<1
TJ-02-071100-WD	nd	<30	1.6	0.51	0.031	<0,1	<0,1	20	4.1
TJ-02-071100-WS									
TJ-02-071100-B	18650	<30	44	<0,1	7.9	<0,1	17	nd	<1
TJ-02-071100-V									
TJ-02-071100-S	15580	<30	60	0.54	6	<0,1	5.5	nd	<1
TJ-03-041100-WD	nd	<30	<1	<1	0.049	<0,1	<0,1	20	3.1
TJ-03-041100-WS									
TJ-03-041100-B	20690	<30	62	1	5.4	<0,1	3	nd	2.3
TJ-03-041100-V	405	<30	3.5	0.052	0.26	<0,1	0.13	14	<1
TJ-03-041100-S	14195	<30	51	1.1	6.4	<0,1	6.2	nd	<1
TJ-04-101100-WD	nd	<30	<1	14	0.046	<0,1	<0,1	60	<1
TJ-04-101100-WS									
TJ-04-101100-B	13910	<30	47	<0,1	7.5	<0,1	5.6	nd	<1
TJ-04-101100-V	780	<30	13	0.13	0.11	<0,1	0.9	<10	1.3
TJ-04-101100-S	16140	<30	48	<0,1	6.1	<0,1	7.3	nd	1.6

Provisional Data

Analysis performed by Uzbekistan Institute of Nuclear Physics

Sample ID	Na	Ni	Rb	Sb	Sc	Se	Th	Zn	U
TJ-05-101100-W/D	nd	<30	<1	1.1	0.075	<0,1	<0,1	21	2.7
TJ-05-101100-WS									
TJ-05-101100-B	13080	<30	<10	<0,1	8	<0,1	12	nd	<1
TJ-05-101100-V	210	<30	<1	0.13	0.17	<0,1	<0,1	<10	<1
TJ-05-101100-S	13620	<30	<10	0.3	2	<0,1	4.3	nd	<1
TJ-06-071100-W/D	nd	<30	<1	<0,1	0.05	<0,1	<0,1	13	<1
TJ-06-071100-WS									
TJ-06-071100-B	12710	<30	41	<0,1	4.3	<0,1	4.8	nd	<1
TJ-06-071100-V									
TJ-06-071100-S	12495	<30	48	0.8	7.2	<0,1	4.1	nd	<1
TJ-07-101100-W/D	20690	33	2.2	0.22	0.089	0.51	<0,1	62	1.3
TJ-07-101100-WS									
TJ-07-101100-B	12930	<30	39	<0,1	11	<0,1	5.7	nd	<1
TJ-07-101100-V									
TJ-07-101100-S	15400	<30	35	0.8	9.9	<0,1	2.8	nd	<1
TJ-08-DATE-W/D									
TJ-08-DATE-WS									
TJ-08-DATE-B									
TJ-08-DATE-V									
TJ-08-DATE-S									
TJ-09-141100-W/D	17630	60	2.7	2.1	0.027	0.46	<0,1	10	<1
TJ-09-141100-WS									
TJ-09-141100-B	8577	<30	<20	<0,1	5	<0,1	2	nd	<1

Provisional Data

Analysis performed by Uzbekistan Institute of Nuclear Physics

Sample ID	Na	Ni	Rb	Sb	Sc	Se	Th	Zn	U
TJ-09-141100-V									
TJ-09-141100-S	12060	<30	30	<0,1	10	<0,1	2.9	nd	<1
TJ-10-141100-WD	59500	160	<1	0.37	0.15	0.52	<0,1	35	1.9
TJ-10-141100-WS									
TJ-10-141100-B	8415	<30	<10	2.2	8.6	<0,1	2.3	nd	<1
TJ-10-141100-V									
TJ-10-141100-S	18465	<30	43	<0,1	9.2	<0,1	2.7	nd	<1
TJ-11-141100-WD	31380	<30	<1	0.17	0.26	<0,1	<0,1	<10	2.1
TJ-11-141100-WS									
TJ-11-141100-B	12410	<30	35	<0,1	6.4	<0,1	3.6	nd	<1
TJ-11-141100-V									
TJ-11-141100-S	13400	<30	34	<0,1	6.8	<0,1	3.5	nd	<1
TJ-12-DATE-WD									
TJ-12-DATE-WS									
TJ-12-DATE-B									
TJ-12-DATE-V									
TJ-12-DATE-S									
TJ-13-241100-WD	21760	<30	1.9	0.51	0.04	1.8	<0,1	47	8.1
TJ-13-241100-WS									
TJ-13-241100-B	10480	<30	51	0.79	8.1	<0,1	5.4	nd	<1
TJ-13-241100-V	1572	<30	3	<0,01	0.36	<0,1	0.2	<10	0.26
TJ-13-241100-S	24930	<30	70	1.4	7.1	<0,1	3.5	nd	<1
TJ-14-241100-WD	25775	69	<1	0.21	0.043	1.1	<0,1	18	5.7

Provisional Data**Analysis performed by Uzbekistan Institute of Nuclear Physics**

Sample ID	Na	Ni	Rb	Sb	Sc	Se	Th	Zn	U
TJ-14-241100-WS									
TJ-14-241100-B	9136	<30	32	<0,1	7.5	<0,1	4.9	nd	3.8
TJ-14-241100-V	1735	<30	18	<0,01	2.8	<0,1	1.2	<10	2.7
TJ-14-241100-S	13800	<30	40	0.57	6.5	<0,1	4.1	nd	<1
TJ-15-251100-WD	35190	<30	<1	0.65	0.15	5.8	<0,1	56	9.5
TJ-15-251100- WS									
TJ-15-251100- B	9123	<30	41	<0,1	7.5	<0,1	8.6	nd	<1
TJ-15-251100- V									
TJ-15-251100- S	9130	<30	69	<0,1	9	<0,1	4.2	nd	4.2

B.2.20 Tajikistan Basic Water Quality, Spring 2001

Sample ID	Water Temp. (deg C)	Dissolved Oxygen (% saturation)	Dissolved Oxygen (mg/L)	Specific Conductivity (μ S/cm)	Salinity (g/L)	TDS (g/L)	Depth (m)	pH	Redox Potential (mV)
TJ-01-290601-WD	13.7	94.86	8.905	0.125	0.05	0.0798	-0.92	7.63	429.2
TJ-02-100701-WD	17.66	101.52	8.74	0.14	0.06	0.0906	-0.08	7.96	414.37
TJ-03-030701-WD	19.1	88.6	7.42	0.171	0.075	0.11	-0.5	8.08	425.4
TJ-04-170701-WD	19.15	105.12	8.79	0.26	0.13	0.17	-0.49	8.04	315.06
TJ-05-200701-WD	26.76	112.76	8.15	0.76	0.39	0.49	-0.12	7.97	323.45
TJ-06-110701-WD	22.23	99.74	7.79	0.49	0.25	0.31	-0.66	7.82	360.96
TJ-07-220701-WD	19.97	101.29	8.31	0.84	0.44	0.54	-0.2	7.92	357.17
TJ-08-210701-WD	18.13	81.47	6.94	0.94	0.49	0.6	-0.2	7.24	375
TJ-09-270701-WD	15.17	108.59	9.9	0.49	0.24	0.31	-0.49	8.04	348.52
TJ-10-250701-WD	32.99	158.18	10.19	1.93	1.03	1.23	-0.35	8.38	230.25
TJ-11-260701-WD	24.04	86.29	6.51	2.48	1.33	1.59	-0.27	7.74	325.96
TJ-12-260701-WD	26.51	99.81	7.1	5.83	3.22	3.73	-0.26	7.93	342.1
TJ-13-060801-WD	21.89	99.35	7.99	1.3	0.68	0.85	-0.18	8	407.63
TJ-14-040801-WD	25.67	93.04	6.96	1.51	0.8	0.97	-0.37	7.89	376.9
TJ-15-070801-WD	18.38	96.79	8.35	0.98	0.51	0.63	-0.44	7.92	355.9

B.2.21 Tajikistan Radionuclides, Spring 2001

Sample ID	Beta activity (Bk/kg)	Alpha activity (Bk/kg)	K-40	Tl-208	Bi-212	Pb-212	Bi-214	Pb-214	Ra-226	Ac-228	Th-232	U-235	U-238
TJ-01-290601-WD	0.081	0.048	0.14	0.04	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01
TJ-01-290601-WS													
TJ-01-290601-B	1104.5	944.2	838	50	117	125	84	74	108	101	110	1	154
TJ-01-290601-V													
TJ-01-290601-S	727.9	596.6	588	21	39	39	30	34	57	27	33	0.4	55
TJ-02-100701-WD	0.087	0.005	0.09	<0,01	<0,01	0.02	0.05	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01
TJ-02-100701-WS													
TJ-02-100701-B	981.8	888.4	849	25	81	71	42	46	59	53	66	0.5	88
TJ-02-100701-V													
TJ-02-100701-S	862.4	1025.8	662	32	85	84	44	52	87	62	74	0.7	105
TJ-03-030701-WD	0.064	0.007	0.22	nd	nd	0.02	nd	nd	nd	nd	nd	nd	nd
TJ-03-030701-WS													
TJ-03-030701-B	672.5	459.2	794	20	47	51	30	33	51	41	44	0.5	84
TJ-03-030701-V													
TJ-03-030701-S	906.7	914.2	744	33	99	101	64	70	105	78	85	0.9	137
TJ-04-170701-WD	0.057	0.025	0.22	0.02	nd	nd	nd	0.02	nd	nd	nd	nd	nd
TJ-04-170701-WS													
TJ-04-170701-B	758	485	708	22	62	55	27	32	44	40	50	0.4	78
TJ-04-170701-V	66.2	9.8	154	0.3	<5	1.2	<5	1.1	3.7	2.4	2	0.06	9
TJ-04-170701-S	703.4	768.3	707	40	91	85	37	43	85	64	78	0.6	92

Provisional Data

Analysis performed by Uzbekistan Institute of Nuclear Physics

Sample ID	Beta activity (Bk/kg)	Alpha activity (Bk/kg)	K-40	Tl-208	Bi-212	Pb-212	Bi-214	Pb-214	Ra-226	Ac-228	Th-232	U-235	U-238
TJ-05-200701-WD	0.112	0.056	0.17	nd	nd	nd							
TJ-05-200701-WS													
TJ-05-200701-B	753.5	343.4	738	18	39	38	22	24	38	30	34	0.3	43
TJ-05-200701-V													
TJ-05-200701-S	939.6	527.9	599	20	42	49	31	34	52	35	39	0.5	74
TJ-06-110701-WD	0.108	0.05	0.12	nd	nd	nd	0.07	nd	0.01	0.01	nd	nd	0.07
TJ-06-110701-WS													
TJ-06-110701-B	512.9	240.4	534	12	35	28	<15	20	30	22	28	0.2	39
TJ-06-110701-V	208.1	20.2	231	1.1	2.6	1.4	0.5	0.9	3.1	2.6	2.4	0.04	6.4
TJ-06-110701-S	372.5	339.1	516	25	40	31	18	22	45	23	32	0.2	36
TJ-07-220701-WD	0.096	0.007	0.07	<0,01	<0,01	0.007	<0,01	<0,01	0.03	0.003	<0,01	<0,01	0.02
TJ-07-220701-WS													
TJ-07-220701-B	464.8	416.3	439	20	38	45	31	36	53	38	38	0.6	89
TJ-07-220701-V	40.7	2.6	44	<2	<5	<0.03	4.4	2.4	5	<1.5	<1.5	<0.05	<4
TJ-07-220701-S	584.8	283.3	450	22	37	39	26	30	36	27	32	0.4	59
TJ-08-210701-WD	0.136	0.053	0.03	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01	0.05
TJ-08-210701-WS													
TJ-08-210701-B													
TJ-08-210701-V													
TJ-08-210701-S													
TJ-09-270701-WD	0.081	0.031	0.5	0.02	<0,01	0.03	0.03	<0,01	0.2	0.07	0.06	<0,01	0.15
TJ-09-270701-WS													

Provisional Data

Analysis performed by Uzbekistan Institute of Nuclear Physics

Sample ID	Beta activity (Bk/kg)	Alpha activity (Bk/kg)	K-40	Tl-208	Bi-212	Pb-212	Bi-214	Pb-214	Ra-226	Ac-228	Th-232	U-235	U-238
TJ-09-270701-B	405.5	656.7	559	15	32	29	19	23	38	22	27	0.2	40
TJ-09-270701-V													
TJ-09-270701-S	509.4	382.8	488	21	29	34	25	28	41	27	28	0.3	52
TJ-10-250701-WD	0.134	0.055	0.47	0.07	<0,01	<0,01	<0,01	<0,01	0.16	0.06	0.05	<0,01	0.06
TJ-10-250701-WS													
TJ-10-250701-B													
TJ-10-250701-V													
TJ-10-250701-S	383.3	339.1	352	20	34	32	23	26	38	21	28	0.2	41
TJ-11-260701-WD	0.268	0.199	0.02	<0,01	<0,01	<0,01	0.04	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01
TJ-11-260701-WS													
TJ-11-260701-B	298	201.7	395	21	24	26	18	22	32	19	22	0.2	35
TJ-11-260701-V													
TJ-11-260701-S	440.1	656.7	434	19	39	39	23	29	42	31	35	0.3	59
TJ-12-260701-WD	0.126	0.082	0.02	0.03	<0,01	0.07	0.07	0.08	0.2	0.06	0.07	<0,01	<0,01
TJ-12-260701-WS													
TJ-12-260701-B	356	386.3	335	20	29	26	20	23	29	19	24	0.3	47
TJ-12-260701-V													
TJ-12-260701-S	326.4	339.1	354	17	31	31	20	25	34	23	27	0.3	48
TJ-13-060801-WD	0.236	0.163	0.01	0.02	<0,01	0.02	0.07	<0,01	0.05	0.04	0.05	<0,01	0.05
TJ-13-060801-WS													
TJ-13-060801-B	381.2	214.6	483	20	28	27	19	22	38	20	44	0.2	38
TJ-13-060801-V	119.2	9.6	56.6	0.2	<5	0.4	0.8	0.5	2.2	1	0.9	0.02	3

Provisional Data**Analysis performed by Uzbekistan Institute of Nuclear Physics**

Sample ID	Beta activity (Bk/kg)	Alpha activity (Bk/kg)	K-40	Tl-208	Bi-212	Pb-212	Bi-214	Pb-214	Ra-226	Ac-228	Th-232	U-235	U-238
TJ-13-060801-S	342.5	313.3	411	20	32	28	22	24	32	22	27	0.3	46
TJ-14-040801-WD	0.297	0.28	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	0.06	<0.01	<0.01	<0.01	0.08
TJ-14-040801-WS													
TJ-14-040801-B	414.1	442.1	505	20	33	32	28	31	37	24	27	0.5	83
TJ-14-040801-V	194.4	40	179	<2,0	<5	5	<5	4	8.9	<1,5	1.5	0.06	84
TJ-14-040801-S	386.9	339.1	481	14	31	40	28	31	54	30	30	0.5	78
TJ-15-070801-WD	0.194	0.094	0.29	<0.01	<0.01	0.006	<0.01	<0.01	0.04	0.013	0.01	<0.01	0.02
TJ-15-070801-WS													
TJ-15-070801-B	480.4	287.6	515	23	51	60	53	59	80	45	48	0.7	112
TJ-15-070801-V													
TJ-15-070801-S	477.8	240.4	555	24	48	46	42	47	71	33	41	0.6	88

B.2.22 Tajikistan Metals, Spring 2001
Ag through Mn

Sample ID	Ag	Au	Ba	Br	Ca	Co	Cr	Cu	Cs	Eu	Fe	Hg	K	La	Mn
TJ-01-290601-WD	<0,1	0.006	nd	0.66	16163	0.17	2.8	nd	0.13	<0,01	260	0.11	1290	0.5	4.3
TJ-01-290601-WS															
TJ-01-290601-B	<1	<0.001	310	<1	23960	6.3	<1	nd	3.6	0.84	18440	nd	36700	159	610
TJ-01-290601-V															
TJ-01-290601-S	<1	0.03	274	<1	67695	7	24	nd	4.3	1.2	14950	nd	22530	39	415
TJ-02-100701-WD	<0,1	0.0082	nd	1.6	19860	0.13	6.3	nd	0.038	<0,01	178	0.28	1680	0.39	2.7
TJ-02-100701-WS															
TJ-02-100701-B	<1	<0.001	320	<1	36480	5.4	<1	nd	4.6	1	14660	nd	36700	34	390
TJ-02-100701-V															
TJ-02-100701-S	<1	<0.001	<100	<1	37400	10	11	nd	6.4	1.2	20520	nd	25665	59	690
TJ-03-030701-WD	<0,1	0.0052	nd	<0,1	8850	5.1	7.1	nd	<0,01	<0,01	383	0.18	335	0.35	6.1
TJ-03-030701-WS	,														
TJ-03-030701-B	<1	<0.001	460	<1	30080	4.9	14	nd	3.6	1	14440	nd	29250	47	325
TJ-03-030701-V															
TJ-03-030701-S	<1	0.024	435	<1	33490	6.8	<1	nd	2.8	1.4	16070	nd	23320	154	467
TJ-04-170701-WD	<0,1	0.48	nd	0.94	19660	0.22	2.8	nd	<0,01	<0,01	255	0.13	<100	0.29	8.9
TJ-04-170701-WS															
TJ-04-170701-B	<1	<0.001	300	<1	43540	5.3	17	nd	2.7	0.93	12810	nd	23080	56	390
TJ-04-170701-V	<0,1	0.053	55	24	23280	2	4.7	<10	0.55	0.13	2340	nd	44190	6	682
TJ-04-170701-S	<1	<0.001	345	<1	45950	6.8	17	nd	3.6	0.92	15470	nd	29290	41	420

Provisional Data

Analysis performed by Uzbekistan Institute of Nuclear Physics

Sample ID	Ag	Au	Ba	Br	Ca	Co	Cr	Cu	Cs	Eu	Fe	Hg	K	La	Mn
TJ-05-200701-WD	<0.1	0.015	nd	2.2	43615	0.34	3.6	nd	<0.01	0.057	460	0.29	<100	0.57	17
TJ-05-200701-WS															
TJ-05-200701-B	<1	<0.001	320	<1	31440	4.8	13	nd	2.3	0.74	10800	nd	33035	27	320
TJ-05-200701-V															
TJ-05-200701-S	<1	0.021	277	<1	41900	5.8	15	nd	2.9	0.95	12430	nd	15810	33	420
TJ-06-110701-WD	1.5	0.26	nd	<0.1	39400	1.4	5.5	nd	<0.01	0.029	1822	0.13	<100	1.5	19
TJ-06-110701-WS															
TJ-06-110701-B	<1	0.025	326	<1	51560	4.6	10	nd	2.4	1	9760	nd	52000	29	360
TJ-06-110701-V	<0,1	0.026	<10	57	45395	6.1	3.7	<10	0.83	0.29	3860	nd	22730	10	430
TJ-06-110701-S	<1	<0.001	240	<1	37600	4.8	13	nd	1.8	0.96	9375	nd	17080	32	321
TJ-07-220701-WD	<1	0.15	nd	2.2	50900	0.34	4.8	nd	<0,01	<0,01	427	0.22	<100	1.3	9
TJ-07-220701-WS															
TJ-07-220701-B	<1	<0,001	<100	<1	100280	9.2	36	nd	3.4	16	17820	nd	25720	64	750
TJ-07-220701-V	<0,1	0.014	10	9.6	15880	0.15	0.43	<10	<0,1	<0,01	165	0.04	15880	<0,1	57
TJ-07-220701-S	<1	0.028	270	<1	80660	6.9	31	nd	1.4	1	12780	nd	26770	38	445
TJ-08-210701-WD	<0,1	<0,001	nd	<0,1	38470	0.11	4.5	nd	<0,01	<0,01	121	0.39	<100	<0,1	5.9
TJ-08-210701-WS															
TJ-08-210701-B															
TJ-08-210701-V															
TJ-08-210701-S															
TJ-09-270701-WD	<0,1	0.038	nd	<0,1	6520	0.088	4	nd	0.046	<0,01	177	0.067	<100	<0,1	<1
TJ-09-270701-WS															
TJ-09-270701-B	4.3	0.1	440	<1	52460	6.7	8.3	nd	2.8	1.1	15175	nd	19290	66	460

Provisional Data

Analysis performed by Uzbekistan Institute of Nuclear Physics

Sample ID	Ag	Au	Ba	Br	Ca	Co	Cr	Cu	Cs	Eu	Fe	Hg	K	La	Mn
TJ-09-270701-V															
TJ-09-270701-S	<1	<0.001	<100	<1	67590	7.7	24	nd	2.6	1	15330	nd	15785	25	480
TJ-10-250701-WD	<0,1	0.045	nd	<0,1	<1000	0.28	2.3	nd	<0,01	<0,01	417	0.27	<100	1	20
TJ-10-250701-WS															
TJ-10-250701-B															
TJ-10-250701-V															
TJ-10-250701-S	<1	<0.001	375	<1	69350	7.9	18	nd	1.6	0.77	15160	nd	10790	32	544
TJ-11-260701-WD	<0,1	<0,001	nd	<0,1	68150	0.22	3.2	nd	<0,01	<0,01	300	<0,01	<100	2.6	<1
TJ-11-260701-WS															
TJ-11-260701-B	<1	0.033	<100	<1	54800	6.8	26	nd	1.6	1.1	14220	nd	15940	38	506
TJ-11-260701-V															
TJ-11-260701-S	<1	<0.001	<100	<1	58090	6.7	26	nd	1.7	1.1	13160	nd	20708	41	463
TJ-12-260701-WD	<0,1	<0,001	nd	8.1	60980	0.3	2.9	nd	0.17	<0,01	315	<0,01	<100	2.4	38
TJ-12-260701-WS															
TJ-12-260701-B		0.053	<100	<1	65950	9	22	nd	2	1.2	18740	nd	13920	35	560
TJ-12-260701-V															
TJ-12-260701-S	<1	<0.001	<100	<1	60670	7	12	nd	2.1	1.2	14950	nd	14075	37	560
TJ-13-060801-WD	<0,1	<0,001	nd	5.2	<1000	0.4	9.9	nd	<0,01	<0,01	256	0.27	<100	1.8	<1
TJ-13-060801-WS															
TJ-13-060801-B	6.5	<0.001	380	<1	78380	6.4	23	nd	2.4	1.1	13500	nd	19430	39	450
TJ-13-060801-V	<0,1	0.012	49	25	12440	1.2	3	<10	0.22	0.042	1180	<0,01	15020	2.5	96
TJ-13-060801-S	<1	<0.001	<100	28	47580	5.5	38	nd	2.9	0.97	12420	nd	21540	31	370
TJ-14-040801-WD	<0,1	<0,001	nd	<0,1	57565	0.22	4.8	nd	<0,01	<0,01	217	0.42	<100	2.4	<1

Sample ID	Ag	Au	Ba	Br	Ca	Co	Cr	Cu	Cs	Eu	Fe	Hg	K	La	Mn
TJ-14-040801-WS															
TJ-14-040801-B	<1	0.026	416	<1	66300	6	10	nd	2.4	0.91	12680	nd	13777	35	510
TJ-14-040801-V	<0,1	0.021	70	16	15440	1.4	1.8	<10	0.22	0.035	860	<0,01	15440	3.5	125
TJ-14-040801-S	<1	0.034	294	11	75680	7.3	22	nd	2.6	1	14320	nd	15100	39	490
TJ-15-070801-WD	<0,1	0.1	nd	<0,1	76250	0.76	86	nd	0.3	<0,01	1690	0.35	<100	1.6	8.1
TJ-15-070801-WS															
TJ-15-070801-B	<1	0.025	620	<1	64330	6.1	17	nd	4.3	1.2	13510	nd	<1000	63	670
TJ-15-070801-V															
TJ-15-070801-S	<1	<0.001	563	<1	59660	7.4	26	nd	5.1	1.1	15240	nd	19720	49	444

B.2.23 Tajikistan Metals, Spring 2001
Na through U

Sample ID	Na	Ni	Rb	Sb	Sc	Se	Th	Zn	U
TJ-01-290601-WD	2490	nd	1.4	0.26	0.043	0.26	0.15	45	2.9
TJ-01-290601-WS									
TJ-01-290601-B	24900	<30	62	<0,1	8.9	<0,1	25	nd	7.8
TJ-01-290601-V									
TJ-01-290601-S	6010	<30	51	1.4	8	<0,1	4.6	nd	2.9
TJ-02-100701-WD	3010	nd	1.7	0.57	0.024	0.38	0.038	16	6
TJ-02-100701-WS									
TJ-02-100701-B	21720	<30	126	1.1	6.6	<0,1	13	nd	3.3
TJ-02-100701-V									

Provisional Data**Analysis performed by Uzbekistan Institute of Nuclear Physics**

Sample ID	Na	Ni	Rb	Sb	Sc	Se	Th	Zn	U
TJ-02-100701-S	11300	<30	54	1.6	10	<0.1	7.4	nd	4.3
TJ-03-030701-WD	1650	nd	<1	0.25	0.072	1	0.3	31	1.9
TJ-03-030701-WS									
TJ-03-030701-B	22420	<30	92	2	6.3	<0.1	5.4	nd	<0.5
TJ-03-030701-V									
TJ-03-030701-S	19060	<30	63	1.3	7.6	<0.1	18	nd	4.2
TJ-04-170701-WD	4166	nd	<1	0.22	0.02	0.39	0.073	8.2	1.5
TJ-04-170701-WS									
TJ-04-170701-B	18120	<30	48	1.2	6.9	<0.1	6.2	nd	2.8
TJ-04-170701-V	1770	nd	26	0.19	1.1	<0.1	0.85	<1	2.5
TJ-04-170701-S	18420	<30	77	2	7.1	<0.1	3.3	nd	1.9
TJ-05-200701-WD	20860	nd	<1	0.31	0.096	0.92	0.3	7.5	5.7
TJ-05-200701-WS									
TJ-05-200701-B	23000	<30	60	0.9	5	<0.1	4	nd	2
TJ-05-200701-V									
TJ-05-200701-S	18630	<30	61	2.1	6.4	<0.1	4.7	nd	3.3
TJ-06-110701-WD	16460	nd	<1	1	0.39	1.8	0.86	15	4.9
TJ-06-110701-WS									
TJ-06-110701-B	11440	<30	34	0.32	5.3	<0.1	3.5	nd	2.5
TJ-06-110701-V	7995		12	0.33	1.9	<0.1	1.1	<1	2.1
TJ-06-110701-S	12485	<30	48	1.3	4.8	<0.1	4.6	nd	2
TJ-07-220701-WD	47380	nd	3.1	0.32	0.093	0.58	0.17	42	2.7
TJ-07-220701-WS									

Provisional Data**Analysis performed by Uzbekistan Institute of Nuclear Physics**

Sample ID	Na	Ni	Rb	Sb	Sc	Se	Th	Zn	U
TJ-07-220701-B	18870	<30	38	1	11	<0,1	7	nd	4.5
TJ-07-220701-V	886		6.3	0.4	0.075	0.38	0.07	26	<1
TJ-07-220701-S	14940	<30	<10	1.5	7.1	<0,1	4.5	nd	2.7
TJ-08-210701-WD	58850	nd	2.3	0.47	0.025	1.8	0.17	21	3.3
TJ-08-210701-WS									
TJ-08-210701-B									
TJ-08-210701-V									
TJ-08-210701-S									
TJ-09-270701-WD	25740	nd	5.9	0.24	0.025	0.84	0.088	<1	1.3
TJ-09-270701-WS									
TJ-09-270701-B	10620	<30	32	1.2	7.8	<0,1	6	nd	3.5
TJ-09-270701-V									
TJ-09-270701-S	13110	<30	35	<0,1	9	<0,1	4.1	nd	5
TJ-10-250701-WD	175788	nd	<1	0.27	0.073	<0,1	0.19	27	<0,1
TJ-10-250701-WS									
TJ-10-250701-B									
TJ-10-250701-V									
TJ-10-250701-S	18040		<10	0.75	8.2	<0,1	3.2	nd	<0,5
TJ-11-260701-WD	238555	nd	<1	0.62	0.076	<0,1	<0,01	17	<0,1
TJ-11-260701-WS									
TJ-11-260701-B	15640	<30	28	1.3	6.4	<0,1	4.1	nd	3
TJ-11-260701-V									
TJ-11-260701-S	13695	<30	40	1.5	6.9	<0,1	4.1	nd	3.3

Provisional Data**Analysis performed by Uzbekistan Institute of Nuclear Physics**

Sample ID	Na	Ni	Rb	Sb	Sc	Se	Th	Zn	U
TJ-12-260701-WD	486075	nd	<1	0.2	0.07	<0.1	0.35	8.2	<0.1
TJ-12-260701-WS									
TJ-12-260701-B	16200	<30	<10	1	8.8	<0.1	2.9	nd	4
TJ-12-260701-V									
TJ-12-260701-S	19740	<30	24	2.7	8.6	<0.1	2.8	nd	2.3
TJ-13-060801-WD	163850	nd	<1	0.56	0.08	2.9	0.16	34	3.6
TJ-13-060801-WS									
TJ-13-060801-B	10470	<30	33	1.4	6.5	<0.1	4.6	nd	1.9
TJ-13-060801-V	4040			6.8	0.27	0.53	0.59	0.33	<1
TJ-13-060801-S	79960	<30	48	2.2	6	<0.1	3.6	nd	3
TJ-14-040801-WD	93734	nd	<1	1.7	0.045	3	<0.01	35	8.4
TJ-14-040801-WS									
TJ-14-040801-B	11210	<30	43	1.6	6.3	<0.1	6.8	nd	2.5
TJ-14-040801-V	5580		4	0.36	0.35	0.87	0.18	<1	17
TJ-14-040801-S	15120	<30	48	1.8	6.9	<0.1	4.1	nd	3.6
TJ-15-070801-WD	43065	nd	<1	0.81	0.14	2.5	<0.01	15	11
TJ-15-070801-WS									
TJ-15-070801-B	14340	<30	53	2.3	7	<0.1	6.9	nd	4.1
TJ-15-070801-V									
TJ-15-070801-S	8540	<30	78	0.61	7.7	<0.1	5.3	nd	3.1

B.2.24 Uzbekistan Basic Water Quality, Fall 2000

Sample ID	Dis-charge (m ³ /s)	Water Temp. (deg C)	Dissolved Oxygen (% saturation)	Dissolved Oxygen (mg/L)	Specific Conductivity (µS/cm)	Salinity (g/L)	TDS (g/L)	Depth (m)	pH	Redox Potential (mV)
UZ-01-091100-WD	4	3	93,3	11,7	1941,0	1,04	1,242	1,1	8,22	321
UZ-02-091100-WD	79	2	95,8	12,4	1799,0	0,96	1,152	1,1	8,19	329
UZ-03-091100-WD	89	5	91,8	11,1	1790,0	0,95	1,146	0,9	8,15	342
UZ-04-121100-WD	428	13	92,0	9,2	795,8	0,41	0,509	0,5	8,05	374
UZ-05-171100-WD	51	13	105,6	10,4	221,9	1,19	1,420	0,9	7,81	388
UZ-06-241100-WD	114	13	100,1	9,9	1798,0	0,96	1,51	0,8	8,05	344
UZ-07-191100-WD	3	9	91,3	9,8	188,9	0,09	0,121	0,1	8,0	365
UZ-08-191000-WD	30	11	92,8	9,5	218,4	0,10	0,139	0,1	7,97	363
UZ-09-171000-WD	3	16	100,4	9,3	686,7	0,35	0,439	0,6	8,31	359
UZ-10-121000-WD	113	13	93,9	9,4	220,4	0,10	0,141	0,2	7,91	416
UZ-11-101000-WD	48	21	133,1	11,2	384,6	0,19	0,296	0,3	8,54	355
UZ-12-101000-WD	0	17	143,1	12,9	492,0	0,25	0,315	0,4	8,79	336

B.2.25Uzbekistan Radionuclides, Fall 2000

Sample ID	Beta activity (Bk/kg)	Alpha activity (Bk/kg)	K-40	Tl-208	Pb-212	Bi-214	Pb-214	Ra-226	Ac-228	Th-232	U-235	U-238
UZ-01-091100-WD	0,277	0,073	1.636	<0,05	0,238	0,023	<1	<1	0,287	0,111	<0,1	0,03
UZ-01-091100-WS												
UZ-01-091100-B	392,3	167,3	204,8	32,3	<0,05	21,2	23,8	<1	10,3	8,1	<0,1	30,7
UZ-01-091100-V	155,4	20,7	105,6	4,2	4,4	2,7	3,3	<1	4,0	2,8	<0,1	3,1
UZ-01-091100-S	392,8	96,2	217,6	<0,05	<0,05	26,9	26,5	<1	20,4	18,9	<0,1	27,8
UZ-02-091100-WD	0,311	0,146	1.636	<0,05	<0,05	0,075	<1	<1	<0,1	<0,01	<0,1	0,091
UZ-02-091100-WS												
UZ-02-091100-B	314,0	267,1	267,1	<0,05	<0,05	12,3	32,5	<1	<0,1	<0,01	<0,1	15,1
UZ-02-091100-V	119,7	0,146	13,2	2,5	2,8	2,4	2,3	6,2	2,2	1,8	0,3	2,8
UZ-02-091100-S	375,2	209,9	280,9	21,8	<0,05	23,6	22,2	<1	26,7	24,1	<0,1	27,2
UZ-03-091100-WD	0,209	0,068	1.402	0,075	0,01	<0,01	<1	<1	0,172	0,154	<0,1	<0,01
UZ-03-091100-WS												
UZ-03-091100-B	317,8	105,6	295,2	21,60	21,8	<0,01	18,8	<1	32,0	27,9	<0,1	<0,01
UZ-03-091100-V	147,8	34,2	145,9	5,0	5,4	4,2	4,3	10,7	5,9	4,7	0,5	5,1
UZ-03-091100-S	317,8	105,6	246	12,4	<0,05	20,3	17,0	<1	13,4	12,1	<0,1	24,2
UZ-04-121100-WD	0,132	0,013	0,701	0,156	<0,05	<001	<1	<1	0,109	0,031	<0,1	<0,01
UZ-04-121100-WS												
UZ-04-121100-B	312,4	225,3	242,5	12,2	14,5	11,1	9,9	<1	13,9	11,8	<0,1	12,6
UZ-04-121100-V	169,9	0,013	85,5	3,8	4,1	2,5	3,8	8,1	4,2	3,6	0,3	3,2
UZ-04-121100-S	351,1	169,2	358,8	19,70	<0,05	18,0	20,1	<1	22,1	17,3	<0,1	21,1

Sample ID	Beta activity (Bk/kg)	Alpha activity (Bk/kg)	K-40	Tl-208	Pb-212	Bi-214	Pb-214	Ra-226	Ac-228	Th-232	U-235	U-238
UZ-05-171000-WD	0,300	0,236	1.168	0.059	<0,05	<0,01	<1	<1	0,172	0,092	<0,1	<0,01
UZ-05-171100-WS												
UZ-05-171100-B	215,0	144,8	137,5	6,1	<0,05	10,7	12,2	<1	14,2	10,1	<0,1	12.8
UZ-05-171100-V	94,2	37,8	63,6	3,4	3,7	4,6	4,5	16,2	8,7	7,1	0,7	5.4
UZ-05-171100-S	419,6	190,4	245,3	11,9	<0,05	14,6	19,8	36,6	13,9	11,2	1,6	16.1
UZ-06-241000-WD	0,484	0,133	0,234	<0,05	0,02	0,055	<1	<1	0,103	0,071	<0,1	0,072
UZ-06-241000-WS												
UZ-06-241000-B	404,1	299,9	343,2	11,1	12,2	11,5	10,5	<1	5,2	3,9	<0,12	12.7
UZ-06-241000-V	94,1	14,8	87	1,4	1,3	1,0	1,3	5,1	2,3	1,7	0,2	1.9
UZ-06-241000-S	419,1	175,3	328,8	14,1	<0,05	<0,01	20,1	<1	16,0	10,7	<0,1	<0,01
UZ-07-191000-WD	0,156	0,079	1,636	0,125	<0,05	<0,01	<1	<1	0,075	0,031	<0,1	<0,01
UZ-07-191000-WS												
UZ-07-191000-B	773,8	502,4	524,1	48,0	<0,05	38,8	46,4	85,4	52,7	49,1	3,6	43.4
UZ-07-191000-V	76,6	388,0	246,3	28,3	33,6	45,6	45,3	85,2	33,3	29,0	3,6	50.2
UZ-07-191000-S	776,5	642,1	429,2	46,4	<0,05	65,0	56,5	90,1	39,9	34,7	3,8	69.2
UZ-08-191000-WD	0,165	0,077	1,168	<0,05	<0,05	<0,01	<1	<1	<0,05	<0,01	<0,1	<0,01
UZ-08-191000-WS												
UZ-08-191000-B	720,8	720,8	524,1	47,1	<0,05	31,5	36,7	44,8	53,2	47,1	1,9	36.1
UZ-08-191000-V	156,4	86,0	73,2	8,9	10,0	9,5	11,0	24,1	10,5	7,3	1,0	12.4
UZ-08-191000-S	1087,3	681,0	537,6	56,7	<0,05	37,3	47,0	64,2	70,0	61,2	2,7	45.3
UZ-09-171000-WD	0,105	0,133	0,701	<0,05	<0,05	<0,01	<1	<1	0,089	0,03	<0,1	<0,01
UZ-09-171000-WS												

Sample ID	Beta activity (Bk/kg)	Alpha activity (Bk/kg)	K-40	Tl-208	Pb-212	Bi-214	Pb-214	Ra-226	Ac-228	Th-232	U-235	U-238
UZ-09-171000-B	253,5	222,2	104,1	20,1	16,5	14,3	17,1	70,8	37,3	30,2	1,1	16,8
UZ-09-171000-V	76,6	55,6	80,3	5,6	3,1	8,1	9,3	13,7	16,2	13,1	0,6	10,8
UZ-09-171000-S	650,9	163,2	486,6	16,9	8,8	4,1	13,5	<1	17,0	14,7	<0,1	6,2
UZ-10-121000-WD	0,062	0,072	0,701	<0,05	<0,05	<0,01	<1	<1	<0,05	<0,01	<0,1	<0,01
UZ-10-121000-WS												
UZ-10-121000-B	206,8	154,6	180,1	14,9	12,5	11,9	9,5	<1	16,3	13,1	<0,1	15,3
UZ-10-121000-V	118,6	82,6	69,9	8,4	10,1	10,0	11,0	20,5	187	14,9	0,9	15,6
UZ-10-121000-S	597,1	290,6	478,4	9,7	<0,05	<0,01	3,8	<1	<0,05	<0,01	<0,1	<0,01
UZ-11-101000-WD	0,017	0,040	1,636	<0,05	<0,05	<0,01	<1	<1	<0,05	0,01	<0,1	<0,01
UZ-11-101000-WS												
UZ-11-101000-B	210,3	137,8	85,2	<0,05	6,8	<0,01	<1	<1	12,7	10,3	<0,1	<0,01
UZ-11-101000-V	56,6	15,2	73,9	4,0	3,5	4,0	4,2	8,2	6,2	4,9	0,4	5,3
UZ-11-101000-S	518,1	116,9	366,7	29,2	<0,05	16,3	26,8	<1	29,1	23,7	<0,1	18,9
UZ-12-101000-WD	0,107	0,013	0,701	<0,05	<0,05	<0,01	<1	<1	<0,05	<0,01	<0,1	<0,01
UZ-12-101000-WS												
UZ-12-101000-B	350,6	226,2	223,9	18,4	21,0	<0,01	14,5	<1	32,3	27,7	<0,1	<0,01
UZ-12-101000-V	65,5	9,9	71,6	2,1	1,8	1,4	1,4	5,4	3,0	1,9	0,2	2,1
UZ-12-101000-S	580,9	209,1	419,1	38,3	<0,05	<0,01	25,0	<1	27,6	20,6	<0,1	<0,01

B.2.26Uzbekistan Metals, Fall 2000
Ag through Mn

Sample ID	Ag	Au	Ba	Br	Ca	Co	Cr	Cu	Cs	Fe	Hg	K	La	Mg	Mn
UZ-01-091100-WD	0.47	0.29	79	95	85000	0.13	1.3	1200	<0,01	78	0.07	nd	<1	<500	170
UZ-01-091100-WS															
UZ-01-091100-B	<0,1		250	<1	nd	14	72	nd	2.8	35000	<0,01		50	nd	510
UZ-01-091100-V	<0,1		130	8.8	22000	0.69	4.1	910	0.19	1400	0.18	7300	3.6	nd	65
UZ-01-091100-S	<0,1		176	<1	57000	4.7	69	nd	1.3	16000	<0,01		52	nd	616
UZ-02-091100-WD	0.14	0.17	69	84	89000	0.032	0.82	<100	<0,01	40	<0,01	nd	6.6	<500	<10
UZ-02-091100-WS															
UZ-02-091100-B	<0,1		<200	<1	nd	16	54	nd	4.5	38000	<0,01	14700	30	nd	410
UZ-02-091100-V	<0,1	0.0054	<50	9.1	22000	0.9	3	<10	0.2	1450	<0,01	8800	1.7	nd	82
UZ-02-091100-S	<0,1		<100	<1	50000	7.8	61	nd	2.6	18000	<0,01	17000	23	nd	570
UZ-03-091100-WD	<0,1	0.35	81	95	68000	0.11	<0,5	420	<0,01	85	0.064	nd	<1	43000	43
UZ-03-091100-WS															
UZ-03-091100-B	<0,1		<200	<1	nd	21	80	nd	6.5	39000	<0,01	15900	35	nd	440
UZ-03-091100-V	<0,1	0.0086	100	5.7	6800	0.52	1.4	17	0.11	680	<0,01	7600	0.95	nd	28
UZ-03-091100-S	<0,1		155	<1	33000	4.8	21	nd	2.3	11000	<0,01	17000	19	nd	320
UZ-04-121100-WD	<0,1	0.38	55	47	81000	0.082	0.98	<100	<0,01	64	<0,01	nd	<1	42000	24
UZ-04-121100-WS															
UZ-04-121100-B	<0,1		860	<1	nd	12	47	nd	4.4	24000	<0,01	13400	23	nd	270
UZ-04-121100-V	<0,1	0.069	60	15	7200	3.9	13	<10	1.4	6280	<0,01	7500	3.3	nd	250
UZ-04-121100-S	<0,1		140	<1	45000	6.8	29	nd	3	14000	<0,01	18000	27	nd	485
UZ-05-171000-WD	<0,1	0.68	78	170	145000	0.18	0.7	1400	<0,01	180	<0,01	nd	11	52000	46

Provisional Data**Analysis performed by Uzbekistan Institute of Nuclear Physics**

Sample ID	Ag	Au	Ba	Br	Ca	Co	Cr	Cu	Cs	Fe	Hg	K	La	Mg	Mn
UZ-05-171100-WS															
UZ-05-171100-B	<0,1		600	<1	nd	12	71	nd	3.4	31000	<0,01	10000	28	nd	305
UZ-05-171100-V	<0,1		57	26	52000	8.6	0.62	750	1	1370	0.084	36000	1	nd	1250
UZ-05-171100-S	<0,1		240	<1	7900	6.4	20	nd	2.2	16000	<0,01	14000	42	nd	535
UZ-06-241000-WD	<0,1	0.34	160	100	170000	0.084	0.74	1200	<0,01	46	<0,01	nd	11	120000	37
UZ-06-241000-WS															
UZ-06-241000-B	<0,1		450	<1	nd	8.5	12	nd	2.6	17000	<0,01	15300	21	nd	253
UZ-06-241000-V	<0,1	0.014	84	17	20000	5.1	5.6	980	0.7	3410	<0,01	40000	4.5	nd	2535
UZ-06-241000-S	<0,1		225	<1	38000	5.1	24	nd	2.4	11000	<0,01	25000	15	nd	370
UZ-07-191000-WD	<0,1	0.63	80	30	30000	0.2	0.98	<100	0.052	236	0.03	nd	7.7	6300	58
UZ-07-191000-WS															
UZ-07-191000-B	<0,1		720	<1	nd	8.7	19	nd	11	30000	<0,01	37400	48	nd	433
UZ-07-191000-V	<0,1		130	8.2	40000	4.1	9.1	880	5.4	11000	<0,01	25000	3.8	nd	1210
UZ-07-191000-S	<0,1		<100	<1	23000	9.6	25	nd	14	26000	<0,01	26000	42	nd	760
UZ-08-191000-WD	<0,1	0.4	70	31	40000	0.11	1.1	150	0.06	145	<0,01	nd	3.7	7800	31
UZ-08-191000-WS															
UZ-08-191000-B	<0,1		757	<1	nd	6.1	8.5	nd	9.9	24000	<0,01	37400	57	nd	280
UZ-08-191000-V	<0,1	0.02	112	14	30000	2.3	5.2	175	1.7	4110	<0,01	15000	15	nd	570
UZ-08-191000-S	<0,1		258	<1	16000	4	<10	nd	6.3	14000	<0,01	31000	37	nd	360
UZ-09-171000-WD	<0,1	0.25	104	75	82000	0.08	1.9	440	<0,01	82	<0,01	nd	12	21000	17
UZ-09-171000-WS															
UZ-09-171000-B	<0,1		880	<1	nd	21	22	nd	7.9	31000	<0,01	<10000	20	nd	3325

Provisional Data**Analysis performed by Uzbekistan Institute of Nuclear Physics**

Sample ID	Ag	Au	Ba	Br	Ca	Co	Cr	Cu	Cs	Fe	Hg	K	La	Mg	Mn
UZ-09-171000-V	<0,1		82	33	26000	8.4	5.3	1470	1.3	2950	<0,01	36000	4.2	nd	3880
UZ-09-171000-S	<0,1		354	<1	67000	5.9	23	nd	4.6	18000	<0,01	30000	51	nd	600
UZ-10-121000-WD	<0,1	0.3	67	24	38000	0.066	0.78	670	<0,01	48	<0,01	nd	3.6	<500	37
UZ-10-121000-WS															
UZ-10-121000-B	<0,1		850	<1	nd	16	25	nd	6.3	29000	<0,01	11300	30	nd	483
UZ-10-121000-V	<0,1		120	43	12000	0.51	10	1750	2.1	14	<0,01	<500	14	nd	7030
UZ-10-121000-S	<0,1		285	<1	50000	5.7	15	nd	4.2	14000	<0,01	22000	29	nd	525
UZ-11-101000-WD	0.17	0.27	67	35	40000	0.096	1.2	580	<0,01	50	0.022	nd	4.6	7800	64
UZ-11-101000-WS															
UZ-11-101000-B	<0,1		370	<1	nd	16	39	nd	5.6	28000	<0,01	13500	31	nd	310
UZ-11-101000-V	<0,1		58	17	54000	7.2	4.6	430	1	3000	<0,01	11000	6.3	nd	920
UZ-11-101000-S	<0,1		<100	<1	73000	9	<10	nd	3.7	19000	<0,01	17000	34	nd	660
UZ-12-101000-WD	0.3	0.31	78	44	43000	0.16	0.95	940	<0,01	69	0.045	nd	5.1	5800	35
UZ-12-101000-WS															
UZ-12-101000-B	<0,1		740	<1	nd	12	22	nd	5	27000	<0,01	21200	31	nd	220
UZ-12-101000-V	<0,1		75	20	30000	6	5.1	1180	1.1	4820	<0,01	47000	5.4	nd	910
UZ-12-101000-S	<0,1		250	<1	54000	6.6	12	nd	3.5	14000	<0,01	24000	28	nd	485

B.2.27 Uzbekistan Metals, Fall 2000
Na through U

Sample ID	Na	Ni	Rb	Sb	Sc	Se	Th	Zn	U
UZ-01-091100-WD	312000	<40	<1	0.57	0.018	1.3	<0,1	49	6.1
UZ-01-091100-WS									
UZ-01-091100-B	13400	<40	83	1.7	16	<0,1	11	nd	<1
UZ-01-091100-V	8000	<40	3.1	1.4	0.69	<0,1	<0,1	nd	<0,5
UZ-01-091100-S	13000	<40	26	0.53	9	<0,1	7.1	nd	4
UZ-02-091100-WD	254000	<40	<1	0.4	0.02	0.64	<0,1	27	<1
UZ-02-091100-WS									
UZ-02-091100-B	13100	<40	90	2.7	15	<0,1	7.3	nd	3.4
UZ-02-091100-V	7800	<40	5.4	0.18	0.72	<0,1	<0,1	nd	<0,5
UZ-02-091100-S	16000	<40	41	0.88	8.5	<0,1	3.4	nd	<1
UZ-03-091100-WD	250000	<40	<1	0.2	0.038	0.86	<0,1	45	8.2
UZ-03-091100-WS									
UZ-03-091100-B	11900	<40	<10	3.6	16	<0,1	10	nd	<1
UZ-03-091100-V	6900	<40	1.8	0.13	0.31	<0,1	<0,1	nd	<0,5
UZ-03-091100-S	10000	<40	40	<0.5	5.3	<0,1	2.6	nd	1
UZ-04-121100-WD	60000	57	<1	0.32	0.015	0.78	<0,1	17	8.6
UZ-04-121100-WS									
UZ-04-121100-B	8100	<40	89	2.6	8.9	<0,1	4.5	nd	2.8
UZ-04-121100-V	2100	<40	19	1	2.8	<0,1	<0,1	nd	0.53
UZ-04-121100-S	8700	<40	63	<0.5	6.6	<0,1	3.4	nd	3.1

Provisional Data

Analysis performed by Uzbekistan Institute of Nuclear Physics

Sample ID	Na	Ni	Rb	Sb	Sc	Se	Th	Zn	U
UZ-05-171000-WD	185000	<40	2.2	0.55	0.082	1	<0,1	38	10
UZ-05-171100-WS									
UZ-05-171100-B	7900	<40	56	1.6	6.7	<0,1	5.9	nd	10
UZ-05-171100-V	11000	<40	5.5	0.22	0.17	1.7	<0,1	nd	3.2
UZ-05-171100-S	8700	<40	45	<0,5	6.5	<0,1	5.8	nd	2
UZ-06-241000-WD	210000	<40	<1	0.4	0.018	2	<0,1	19	15
UZ-06-241000-WS									
UZ-06-241000-B	10900	<40	81	1.7	5.8	<0,1	4.7	nd	<1
UZ-06-241000-V	15000	<40	13	0.33	1.4	2.4	<0,1	nd	2.6
UZ-06-241000-S	13000	<40	59	1.2	4.7	<0,1	2.8	nd	<1
UZ-07-191000-WD	6300	<40	1.5	0.4	0.074	0.4	<0,1	103	19
UZ-07-191000-WS									
UZ-07-191000-B	14900	<40	200	4.8	8.7	<0,1	19	nd	5.2
UZ-07-191000-V	10000	<40	89	0.58	4.5	<0,1	<0,1	nd	6.5
UZ-07-191000-S	12000	<40	68	<0,5	9.9	<0,1	7.3	nd	4.2
UZ-08-191000-WD	8000	<40	<1	0.4	0.08	<0,1	<0,1	65	7.8
UZ-08-191000-WS									
UZ-08-191000-B	19700	<40	234	1.4	7	<0,1	21	nd	6
UZ-08-191000-V	1500	<40	20	0.27	1.9	<0,1	<0,1	nd	2.2
UZ-08-191000-S	13000	<40	89	2.6	5.3	<0,1	9.9	nd	4.3
UZ-09-171000-WD	41000	<40	<1	0.39	0.027	1.3	<0,1	38	17
UZ-09-171000-WS									
UZ-09-171000-B	3100	<40	90	3.4	11	<0,1	10	nd	7.9

Sample ID	Na	Ni	Rb	Sb	Sc	Se	Th	Zn	U
UZ-09-171000-V	14000	<40	13	0.18	1.4	1.5	<0,1	nd	1
UZ-09-171000-S	13000	<40	94	2.2	7.2	<0,1	9.6	nd	2.9
UZ-10-121000-WD	7900	<40	<1	0.36	0.019	0.28	<0,1	28	4.7
UZ-10-121000-WS									
UZ-10-121000-B	9800	<40	90	4.2	9.6	<0,1	8.8	nd	<1
UZ-10-121000-V	2100	<40	24	<0,1	3.5	3.8	<0,1	nd	5.2
UZ-10-121000-S	11000	<40	81	1.2	5.8	<0,1	5	nd	2
UZ-11-101000-WD	18000	<40	<1	0.52	0.018	0.52	<0,1	23	6.7
UZ-11-101000-WS									
UZ-11-101000-B	6900	<40	79	2.3	8.2	<0,1	6.5	nd	<1
UZ-11-101000-V	6000	<40	18	0.45	1.4	1.5	<0,1	nd	1.4
UZ-11-101000-S	9600	<40	75	<0.5	8	<0,1	18	nd	2.6
UZ-12-101000-WD	23000	<40	1.7	0.39	0.022	0.45	<0,1	27	24
UZ-12-101000-WS									
UZ-12-101000-B	10600	<40	88	5.8	7.8	<0,1	9	nd	3.5
UZ-12-101000-V	26000	<40	29	<0,1	1.7	<0,1	<0,1	nd	<0,5
UZ-12-101000-S	13000	<40	51	<0.5	5.6	<0,1	5.2	nd	1.3

B.2.28Uzbekistan Basic Water Quality, Spring 2001

Sample ID	Water Temp. (deg C)	Dissolved Oxygen (% saturation)	Dissolved Oxygen (mg/L)	Specific Conductivity (μ S/cm)	Salinity (g/L)	TDS (g/L)	Depth (m)	pH	Redox Potential (mV)
UZ-01-180501-WD	24	19,7	1,56	3199	1,73	2,048	1,1	7,85	255
UZ-02-180501-WD	23	20,9	1,68	3146	1,7	2,01	1,1	7,85	245
UZ-03-180501-WD	23	18,9	1,52	2714	1,46	1,737	0,9	7,75	267
UZ-04-310501-WD	23	11,4	0,92	1559	0,83	0,9979	0,4	7,78	195
UZ-05-290501-WD	22	11,0	0,91	1747	0,93	1,118	0,5	7,45	278
UZ-06-050601-WD	24	11,0	0,86	1934	1,03	1,238	0,8	220	7,89
UZ-07-310501-WD	19	7,1	0,62	131,2	0,05	0,084	0,1	8,1	254
UZ-08-370501-WD	17	8,9	0,81	160	0,07	0,1022	-	8,53	282
UZ-09-290501-WD	15	9,9	0,94	701,2	0,36	0,4488	0,7	7,38	329
UZ-10-150501-WD	11	16,4	1,7	216,7	0,10	0,1387	0,3	7,76	260
UZ-11-110501-WD	19	23,1	2,03	303,8	0,15	0,1945	0,5	8,14	235
UZ-12-290501-WD	27	10,1	0,75	455	0,23	0,2912	0,5	8,23	282
UZ-13-190507-WD	21	13,7	1,14	282,1	0,14	0,1805	0,2	7,93	278
UZ-14-170501-WD	24	15,5	11,23	724,6	0,37	0,4638	0,5	7,96	278
UZ-15-190501-WD	19	13,2	1,14	3198	1,73	2,047	0,8	6,65	298

B.2.29Uzbekistan Radionuclides, Fall 2000

Sample ID	Beta activity (Bk/kg)	Alpha activity (Bk/kg)	K-40	Tl-208	Bi-212	Pb-212	Bi-214	Pb-214	Ra-226	Ac-228	Th-232	U-235	U-238
UZ-01-180501-WD	0.534	0.353	0.16	<0,01	<0,01	<0,01	0.04	0.05	<0,01	<0,01	<0,01	<0,01	<0,01
UZ-01-180501-WS													
UZ-01-180501-B	622.8	313.3	380	12	26	35	22	26	35	26	26	0.3	47
UZ-01-180501-V	235	25.8	180	2.1	<5	5.7	3.6	4.1	6.7	5.7	6	0.08	11
UZ-01-180501-S	786.2	300.4	590	19	59	56	32	38	50	46	52	0.5	91
UZ-02-180501-WD	0.413	0.34	0.21	<0,01	<0,01	<0,01	<0,01	<0,01	0.02	<0,01	<0,01	<0,01	<0,01
UZ-02-180501-WS													
UZ-02-180501-B	455.7	171.6	340	10	21	22	16	17	18	20	21	0.2	30
UZ-02-180501-V	152.5	12.9	160	2.4	<5	2.8	1.7	2.3	6.6	3.4	4	0.06	8.2
UZ-02-180501-S	400.1	257.3	390	11.7	37	33	24	25	32	28	32	0.3	48
UZ-03-180501-WD	0.272	0.569	0.19	0.056	<0,01	0.034	<0,01	0.06	0.2	0.037	0.04	<0,01	<0,01
UZ-03-180501-WS													
UZ-03-180501-B	607.6	330.5	350	16	53	34	23	25	34	26	39	0.3	52
UZ-03-180501-V	123.8	27.5	130	1.4	<5	2.9	2.4	4	<1,5	3.8	4	<0,05	<4
UZ-03-180501-S	649.2	386.2	520	14.4	42	49	28	30	40	38	40	0.5	74
UZ-04-310501-WD	0.347	0.234	0.14	<0,01	<0,01	<0,01	0.04	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01
UZ-04-310501-WS													
UZ-04-310501-B	471.5	141.7	370	6.5	20	20	15	18	20	16	18	0.2	36
UZ-04-310501-V	101.1	8.5	100	5.6	<5	6.3	4.3	5.3	18	9.9	10	0.2	34
UZ-04-310501-S	528.5	255.6	520	12.6	40	38	26	30	42	30	35	0.4	57

Provisional Data

Analysis performed by Uzbekistan Institute of Nuclear Physics

Sample ID	Beta activity (Bk/kg)	Alpha activity (Bk/kg)	K-40	Tl-208	Bi-212	Pb-212	Bi-214	Pb-214	Ra-226	Ac-228	Th-232	U-235	U-238
UZ-05-290501-WD	0.324	0.309	0.21	<0,01	<0,01	<0,01	0.006	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01
UZ-05-290501-WS													
UZ-05-290501-B	479.1	313.3	230	6.4	<15	15	12	13	25	17	18	0.2	33
UZ-05-290501-V	63.1	11.8	82	1.6	<5	0.6	1	1.2	8.5	2.6	3	0.06	9.2
UZ-05-290501-S	398.2	128.7	525	7	22	25	20	22	22	17	19	0.5	76
UZ-06-050601-WD	0.131	0.268	0.23	<0,01	<0,01	<0,01	0.06	<0,01	0.02	<0,01	<0,01	<0,01	<0,01
UZ-06-050601-WS													
UZ-06-050601-B	555.1	201.7	410	10	22	25	16	20	37	21	22	0.3	43
UZ-06-050601-V	73.4	18.4	86	2.1	<5	2.4	1.5	2.1	9.1	4.4	5	0.2	23
UZ-06-050601-S	452.4	257.5	490	10	32	28	20	25	23	23	27	0.5	79
UZ-07-310501-WD	0.288	0.102	0.12	<0,01	<0,01	<0,01	0.06	<0,01	<0,01	0.02	<0,01	<0,01	<0,01
UZ-07-310501-WS													
UZ-07-310501-B	1745	1446.4	940	30	85	90	77	85	146	78	82	1.2	170
UZ-07-310501-V	165.7	19.2	160	2.3	<5	3.3	3.8	4.2	10	4.2	21	<0,05	<4
UZ-07-310501-S	955.1	729.6	750	30	72	84	56	68	120	93	82	1.3	180
UZ-08-310501-WD	0.097	0.023	0.12	<0,01	<0,01	0.03	<0,01	<0,01	0.05	<0,01	<0,01	<0,01	<0,01
UZ-08-310501-WS													
UZ-08-310501-B	1124.3	716.8	550	20	55	52	44	49	7.8	49	52	1.1	150
UZ-08-310501-V	183	1.8	200	1.6	<5	14	1.5	2.1	1.5	2.8	3	<0,05	<4
UZ-08-310501-S	1059.9	858.4	920	28	87	90	59	64	108	73	80	0.8	119
UZ-09-290501-WD	0.131	0.052	0.16	<0,01	<0,01	<0,01	0.004	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01
UZ-09-290501-WS													

Provisional Data**Analysis performed by Uzbekistan Institute of Nuclear Physics**

Sample ID	Beta activity (Bk/kg)	Alpha activity (Bk/kg)	K-40	Tl-208	Bi-212	Pb-212	Bi-214	Pb-214	Ra-226	Ac-228	Th-232	U-235	U-238
UZ-09-290501-B	476.9	184.7	226	5.6	<15	6.2	2.7	3.5	13	9.1	10	1	144
UZ-09-290501-V	140.5	55.8	57	5.7	<5	6.8	3.9	4.4	15	11	9	0.6	98
UZ-09-290501-S	873.7	343.3	660	19	54	57	31	34	57	50	52	0.6	98
UZ-10-150501-WD	0.051	<0,01	0.18	<0,01	<0,01	0.015	0.01	<0,01	0.02	<0,01	<0,01	<0,01	<0,01
UZ-10-150501-WS													
UZ-10-150501-B	719.1	588.1	350	24	25	28	15	18	24	26	25	0.5	68
UZ-10-150501-V	109.4	20.2	105	2.5	<5	3.9	2.6	3.3	5.4	4.6	5	0.08	11
UZ-10-150501-S	741.5	429.2	530	23	54	49	27	28	41	40	47	0.5	72
UZ-11-150501-WD	0.028	0.061	0.2	<0,01	<0,01	0.01	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01
UZ-11-110501-WS													
UZ-11-110501-B	672	406.7	300	13	34	27	13	16	26	24	29	0.3	44
UZ-11-110501-V	105	16.7	104	4.5	10	4.7	3.4	4	7.6	6.2	8	<0,05	<4
UZ-11-110501-S	707.2	343.3	600	31	56	60	28	32	48	46	51	0.6	90
UZ-12-290501-WD	0.061	0.037	0.25	<0,01	<0,01	<0,01	0.02	<0,01	0.014	<0,01	<0,01	<0,01	<0,01
UZ-12-290501-WS													
UZ-12-290501-B	814.3	429.3	600	18	31	31	17	20	26	28	30	0.4	51
UZ-12-290501-V	61.1	15.1	60	2.1	<5	2.2	1.9	2.4	6.9	7.3	8	0.1	20
UZ-12-290501-S	713.3	343.4	690	16	53	45	24	29	30	44	49	0.5	86
UZ-13-190501-WD	0.06	0.019	0.14	<0,01	<0,01	<0,01	0.01	0.15	<0,01	<0,01	<0,01	<0,01	<0,01

Provisional Data**Analysis performed by Uzbekistan Institute of Nuclear Physics**

Sample ID	Beta activity (Bk/kg)	Alpha activity (Bk/kg)	K-40	Tl-208	Bi-212	Pb-212	Bi-214	Pb-214	Ra-226	Ac-228	Th-232	U-235	U-238
UZ-13-190501-WS													
UZ-13-190501-B	610.2	386.2	410	19	50	37	28	32	45	28	39	<0,05	<4
UZ-13-190501-V	166.5	22.1	180	2.4	5	4.2	3.9	4.6	8.8	4.9	5	0.1	15
UZ-13-190501-S	449.8	343.3	440	15	49	47	36	40	54	40	45	0.5	80
UZ-14-170501-WD	0.073	0.082	0.23	<0,01	<0,01	<0,01	<0,01	<0,01	0.08	<0,01	<0,01	<0,01	<0,01
UZ-14-170501-WS													
UZ-14-170501-B	695.5	287.6	370	12	33	36	24	30	46	30	31	0.3	55
UZ-14-170501-V	112.1	28.3	150	18	<4	3.3	2.8	3.2	5.9	4.9	5	<0,05	<4
UZ-14-170501-S	725.3	343.5	530	18	63	48	35	41	49	38	51	0.5	88
UZ-15-190501-WD	0.126	<0,01	0.15	<0,01	<0,01	<0,01	0.06	0.05	<0,01	<0,01	<0,01	<0,01	<0,01
UZ-15-190501-WS													
UZ-15-190501-B	662	356.2	320	21	32	25	22	25	43	23	28	0.2	40
UZ-15-190501-V	86.2	0.6	100	12	<5	0.4	0.4	0.7	<1,5	<1,5	<1,5	<0,05	<4
UZ-15-190501-S	657.9	257.5	490	19	44	32	27	33	44	31	38	0.5	85

B.2.30Uzbekistan Metals, Spring 2001
Ag through Mn

Sample ID	Ag	Au	Ba	Br	Ca	Co	Cr	Cu	Cs	Eu	Fe	Hg	K	La	Mn
UZ-01-180501-WD	<0,1	0.01	204	12	480180	0.21	<0,1	2200	<0,01	<0,01	<20	<0,1	nd	<0,5	<1
UZ-01-180501-WS															
UZ-01-180501-B	<1		486	<1	nd	10	33	nd	5	1.1	18720	nd	17380	35	590
UZ-01-180501-V															
UZ-01-180501-S	7.2		<100	<1	nd	14	55	nd	5.1	1.2	23340	nd	30750	31	716
UZ-02-180501-WD	<0,1	0.27	195	135	223700	0.1	2.1	<50	<0,01	<0,01	65	<0,1	nd	<0,5	160
UZ-02-180501-WS															
UZ-02-180501-B	<1		<100	<1	nd	7.3	17	nd	2.3	0.91	14280	nd	15480	22	430
UZ-02-180501-V															
UZ-02-180501-S	<1		265	<1	nd	8.3	18	nd	2.2	0.91	16200	nd	20210	29	490
UZ-03-180501-WD	<0,1	0.31	226	110	215260	0.088	0.59	1080	<0,01	<0,01	80	0.11	nd	5	<1
UZ-03-180501-WS	,														
UZ-03-180501-B	<1		<100	<1	nd	11	26	nd	3.1	1.2	19940	nd	19660	32	625
UZ-03-180501-V															
UZ-03-180501-S	<1		<100	<1	nd	13	28	nd	3.9	1.5	22210	nd	26070	41	640
UZ-04-310501-WD	0.41		129	8.1	387840	0.049	1	416	<0,01	<0,01	33	<0,1	nd	0.81	<1
UZ-04-310501-WS															
UZ-04-310501-B	<1		310	<1	nd	4.9	106	nd	2.5	0.82	11420	nd	21500	16	440
UZ-04-310501-V	<0,1														
UZ-04-310501-S	<1		377	<1	nd	6.9	12	nd	2.7	1.1	15820	nd	25250	30	450

Provisional Data

Analysis performed by Uzbekistan Institute of Nuclear Physics

Sample ID	Ag	Au	Ba	Br	Ca	Co	Cr	Cu	Cs	Eu	Fe	Hg	K	La	Mn
UZ-05-290501-WD	<0,1	0.19	242	80	191050	0.088	<0,1	820	<0,01	<0,01	35	<0,1	nd	<0,5	91
UZ-05-290501-WS															
UZ-05-290501-B	<1		270	<1	nd	6.3	56	nd	2.1	0.91	16890	nd	20650	36	600
UZ-05-290501-V															
UZ-05-290501-S	15		396	<1	nd	6.5	58	nd	1.9	0.92	12910	nd	19400	30	565
UZ-06-050601-WD	1.5	0.28	244	93	208150	0.11	1.3	1220	<0,01	<0,01	68	0.19	nd	4.4	29
UZ-06-050601-WS															
UZ-06-050601-B	<1		275	<1	nd	6.7	24	nd	2.6	1.3	14480	nd	21230	27	460
UZ-06-050601-V															
UZ-06-050601-S	<1		630	<1	nd	7.2	7.4	nd	1.6	1	15070	nd	17880	28	388
UZ-07-310501-WD	0.44	0.6	300	15	5020	0.088	0.82	70	<0,01	<0,01	86	<0,1	nd	3.6	27
UZ-07-310501-WS															
UZ-07-310501-B	<1		320	<1	nd	2.7	<1	nd	5	0.81	11740	nd	40690	37	725
UZ-07-310501-V															
UZ-07-310501-S	4.4		<100	<1	nd	9.6	25	nd	14	1.3	19745	nd	28490	40	700
UZ-08-310501-WD	<0,1	0.23	89	6.9	67800	0.17	0.82	<50	<0,01	<0,01	169	<0,1	nd	<0,5	25
UZ-08-310501-WS															
UZ-08-310501-B	<0,1	0.038	400	<1	nd	5.8	17	nd	4.8	0.92	13510	nd	29220	45	620
UZ-08-310501-V															
UZ-08-310501-S			540	<1	nd	5.9	6.2	nd	8.1	0.86	18120	nd	33600	36	490
UZ-09-290501-WD	<0,1	0.33	252	43	148680	0.082	1.9	<50	<0,01	<0,01	136	<0,1	nd	3.3	33
UZ-09-290501-WS															
UZ-09-290501-B	4.3		130	<1	nd	1.3	4.7	nd	1.5	<0,1	3009	nd	<10000	7.9	275

Provisional Data**Analysis performed by Uzbekistan Institute of Nuclear Physics**

Sample ID	Ag	Au	Ba	Br	Ca	Co	Cr	Cu	Cs	Eu	Fe	Hg	K	La	Mn
UZ-09-290501-V															
UZ-09-290501-S	<1		220	<1	nd	8.1	24	nd	3.9	1.2	16860	nd	25840	32	485
UZ-10-150501-WD	<0,1	0.36	94	9.6	78900	<0,01	1.1	230	<0,01	<0,01	45	0.1	nd	<0,5	50
UZ-10-150501-WS															
UZ-10-150501-B	<0,1		<100	<1	nd	5.4	28	nd	2.5	0.93	10770	nd	23700	24	565
UZ-10-150501-V															
UZ-10-150501-S	<1		430	<1	nd	7	23	nd	2.9	0.9	14820	nd	16580	26	410
UZ-11-150501-WD	<0,1	0.34	88	12	75000	0.082	0.82	70	<0,01	<0,01	72	<0,1	nd	<0,5	28
UZ-11-110501-WS															
UZ-11-110501-B	<1		235	<1	nd	8.1	28	nd	4.2	1	13680	nd	23770	34	486
UZ-11-110501-V															
UZ-11-110501-S	<1		350	<1	nd	9.3	18	nd	4.4	1.2	17040	nd	19000	31	560
UZ-12-290501-WD	0.19	0.22	235	20	105260	0.088	1	<50	<0,01	<0,01	73	<0,1	nd	<0,5	22
UZ-12-290501-WS															
UZ-12-290501-B	<0,1		137	<1	nd	5.5	<1	nd	3.7	0.91	11160	nd	26200	25	385
UZ-12-290501-V															
UZ-12-290501-S	<1		540	<1	nd	6.3	10	nd	3	1	13100	nd	20860	28	440
UZ-13-190501-WD	1.8	0.36	<50	10	88400	<0,01	<0,1	210	<0,01	<0,01	<20	0.41	nd	<0,5	225
UZ-13-190501-WS															
UZ-13-190501-B	6.5		320	<1	nd	6.3	35	nd	4.3	1.2	13050	nd	18480	34	454
UZ-13-190501-V															
UZ-13-190501-S	<1		480	<1	nd	7	29	nd	3.3	1.1	16190	nd	18440	37	480
UZ-14-170501-WD	<0,1	0.29	104	34	141570	<0,01	2.1	<50	<0,01	<0,01	53	0.14	nd	<0,5	71

Sample ID	Ag	Au	Ba	Br	Ca	Co	Cr	Cu	Cs	Eu	Fe	Hg	K	La	Mn
UZ-14-170501-WS															
UZ-14-170501-B	<1		<100	<1	nd	5.9	36	nd	3.1	1.2	12520	nd	16560	38	450
UZ-14-170501-V	<0,1														
UZ-14-170501-S	<1		466	<1	nd	8.3	20	nd	4.8	1.3	15730	nd	19420	28	440
UZ-15-190501-WD	<0,1	0.17	310	100	428680	1.9	2	<50	<0,01	<0,01	<20	<0,1	nd	3.7	74
UZ-15-190501-WS															
UZ-15-190501-B	<1		570	<1	nd	8.8	42	nd	4.4	0.74	17600	nd	15740	27	463
UZ-15-190501-V															
UZ-15-190501-S	<1		300	<1	nd	8.2	32	nd	4.5	1.1	16200	nd	14680	29	460

B.2.31 Uzbekistan Metals, Spring 2001
Na through U

Sample ID	Na	Ni	Rb	Sb	Sc	Se	Th	Zn	U
UZ-01-180501-WD	72680	<30	<1	0.16	0.039	<0,1	nd	103	9.6
UZ-01-180501-WS									
UZ-01-180501-B	12670	<30	54	1.9	11	<0,1	4.2	nd	2.8
UZ-01-180501-V									
UZ-01-180501-S	9746	<30	64	10	12	<0,1	5.6	nd	<1
UZ-02-180501-WD	342660	143	<1	0.94	0.039	1.2	nd	36	4.6
UZ-02-180501-WS									
UZ-02-180501-B	15380	<30	48	2.2	8.7	<0,1	3.2	nd	3.2
UZ-02-180501-V									
UZ-02-180501-S	15510	<30	50	4.3	11	<0,1	4.8	nd	<1
UZ-03-180501-WD	300000	125	1.9	0.59	0.035	1.4	nd	22	4.2
UZ-03-180501-WS									
UZ-03-180501-B	11475	<30	47	1.4	11	<0,1	5.1	nd	<1
UZ-03-180501-V									
UZ-03-180501-S	11330	<30	55	2.3	13	<0,1	5.9	nd	<1
UZ-04-310501-WD	10395	<30	<1	0.14	0.039	<0,1	nd	14	4.4
UZ-04-310501-WS									
UZ-04-310501-B	9150	<30	<10	1.6	5.1	<0,1	2.2	nd	<1
UZ-04-310501-V									
UZ-04-310501-S	10445	<30	60	2.3	8.4	<0,1	5.3	nd	<1

Sample ID	Na	Ni	Rb	Sb	Sc	Se	Th	Zn	U
UZ-05-290501-WD	116000	<30	<2	0.82	0.023	1.8	nd	14	9.1
UZ-05-290501-WS									
UZ-05-290501-B	10060	<30	45	2.7	5.7	<0,1	2.8	nd	<1
UZ-05-290501-V									
UZ-05-290501-S	9440	<30	60	2.5	6	<0,1	4.3	nd	<1
UZ-06-050601-WD	151860	<30	<1	0.7	0.039	2.4	nd	24	12
UZ-06-050601-WS									
UZ-06-050601-B	11000	<30	67	2.7	6.7	<0,1	4.5	nd	<1
UZ-06-050601-V									
UZ-06-050601-S	10070	<30	47	2.3	7	<0,1	7.8	nd	<1
UZ-07-310501-WD	9820	<30	<1	0.31	0.058	0.36	nd	57	17
UZ-07-310501-WS									
UZ-07-310501-B	20540	<30	117	4	3.9	<0,1	12	nd	4.9
UZ-07-310501-V									
UZ-07-310501-S	11900	<30	83	2.5	10	<0,1	8.6	nd	7.3
UZ-08-310501-WD	6900	<30	<1	0.59	0.039	0.26	nd	40	4.1
UZ-08-310501-WS									
UZ-08-310501-B	15600	<30	68	3.9	6.9	<0,1	6.9	nd	<1
UZ-08-310501-V									
UZ-08-310501-S	12960	149	116	11	7.2	<0,1	12	nd	4.1
UZ-09-290501-WD	48480	<30	<1	0.41	0.047	1	nd	22	9.6
UZ-09-290501-WS									
UZ-09-290501-B	2064	<30	22	6	1.5	<0,1	1.1	nd	3.6

Sample ID	Na	Ni	Rb	Sb	Sc	Se	Th	Zn	U
UZ-09-290501-V									
UZ-09-290501-S	11400	<30	92	3.2	7.7	<0.1	8.3	nd	3.5
UZ-10-150501-WD	6400	<30	<1	0.34	0.041	<0.1	nd	19	2.6
UZ-10-150501-WS				,					
UZ-10-150501-B	10090	<30	48	2.4	5.8	<0.1	4.1	nd	3.1
UZ-10-150501-V									
UZ-10-150501-S	9440	<30	46	2.1	6.9	<0.1	5.7	nd	2.3
UZ-11-150501-WD	12280	<30	<1	0.37	0.028	0.29	nd	12	3.2
UZ-11-110501-WS									
UZ-11-110501-B	8800	<30	69	1.3	6.6	<0.1	5.9	nd	<1
UZ-11-110501-V									
UZ-11-110501-S	9020	<30	49	2	8.3	<0.1	7.2	nd	<1
UZ-12-290501-WD	23850	<30	<1	0.57	0.041	0.59	nd	23	4.1
UZ-12-290501-WS									
UZ-12-290501-B	17830	<30	87	<1	4.5	<0.1	4.7	nd	2.3
UZ-12-290501-V									
UZ-12-290501-S	14230	<30	63	2.3	5.5	<0.1	5.3	nd	<1
UZ-13-190501-WD	11460	<30	4.1	36	0.013	<0.1	nd	23	2.7
UZ-13-190501-WS									
UZ-13-190501-B	10335	<30	42	13	7.5	<0.1	5	nd	4.1
UZ-13-190501-V									
UZ-13-190501-S	9740	<30	36	8.3	7.3	<0.1	5.9	nd	<1
UZ-14-170501-WD	40760	40	<1	12	0.029	1.8	nd	21	5

Sample ID	Na	Ni	Rb	Sb	Sc	Se	Th	Zn	U
UZ-14-170501-WS									
UZ-14-170501-B	11450	<30	59	4.7	6.7	<0.1	5.2	nd	<1
UZ-14-170501-V									
UZ-14-170501-S	10660	<30	50	1.3	8.2	<0.1	5.1	nd	<1
UZ-15-190501-WD	222000	<30	<1	1.2	0.025	4.3		15	23
UZ-15-190501-WS									
UZ-15-190501-B	7730	<30	42	3.4	6.2	<0.1	4.4	nd	4.4
UZ-15-190501-V									
UZ-15-190501-S	15730	<30	52	3.8	8	<0.1	5	nd	3.9

B.2.32Uzbekistan Basic Water Quality, Fall 2001

Sample ID	Water Temp. (deg C)	Dissolved Oxygen (% saturation)	Dissolved Oxygen (mg/L)	Specific Conductivity (μ S/cm)	Salinity (g/L)	TDS (g/L)	Depth (m)	pH	Redox Potential (mV)
UZ-01-311001-WD	6	99.6	11.7	2041	1.09	1.306	1.2	7.08	258
UZ-02-311001-WD	6	99.9	11.7	1932	1.03	1.236	1.2	7.23	234
UZ-03-311001-WD	6	98.1	11.5	1781	0.95	1.142	0.9	7.09	231
UZ-04-251001-WD	15	91.5	8.8	1227	0.65	0.785	0.5	7.2	286
UZ-05-231001-WD	14	106.2	10.4	1766	0.94	1.13	0.6	7.43	246
UZ-06-231001-WD	16	90.6	8.6	1770	0.94	1.133	0.7	7.25	242
UZ-07-251001-WD	13	91.9	9.2	232.7	0.11	0.149	0.2	7.52	211
UZ-08-251001-WD	16	96.1	9.1	333.3	0.16	0.213	0.1	7.66	241
UZ-09-231001-WD	16	95.7	9	737.5	0.38	0.472	0.7	7.22	218
UZ-10-191001-WD	13	90.1	9.1	498.1	0.25	0.304	0.2	7.65	290
UZ-11-191001-WD	16	117.7	11.1	346.9	0.17	0.222	0.4	8	185
UZ-12-191001-WD	15	111.1	10.6	500.1	0.25	0.32	0.6	7.7	232
UZ-13-301001-WD	10	92.9	10.1	455.4	0.23	0.292	0.3	7.36	218
UZ-14-301001-WD	12	96.6	9.9	745	0.38	0.476	0.6	7.47	223
UZ-15-301001-WD	15	63.5	6	2990	1.61	1.913	0.8	6.31	272

B.2.33Uzbekistan Radionuclides, Fall 2001

Sample ID	Beta activity (Bk/kg)	Alpha activity (Bk/kg)	K-40	Tl-208	Bi-212	Pb-212	Bi-214	Pb-214	Ra-226	Ac-228	Th-232	U-235	U-238
UZ-01-311001-WD	0.243	0.172	0.12	<0,01	0.02	<0,01	0.06	<0,01	<0,01	0.05	<0,01	<0,01	<0,01
UZ-01-311001-WS													
UZ-01-311001-B	509.6	527.9	350	10	34	30	22	25	34	23	29	0.3	45
UZ-01-311001-V	70.2	5.9	77	<1	<5	0.03	<5	1.2	1.4	2.1	2	0.02	2.4
UZ-01-311001-S	469.2	300.4	340	12	36	38	26	34	48	29	33	0.6	82
UZ-02-311001-WD	0.326	0.239	0.14	0.06	<0,01	0.02	<0,01	0.02	<0,01	0.05	<0,01	<0,01	<0,01
UZ-02-311001-WS													
UZ-02-311001-B	419.7	227.3	300	16	50	49	33	37	40	40	45	0.5	71
UZ-02-311001-V	91.8	7.4	83	<1	<5	0.8	<5	<1.2	<1.5	3.5	3	0.02	2.8
UZ-02-311001-S	578.5	515	570	15	46	45	33	37	50	36	41	0.4	63
UZ-03-311001-WD	0.212	0.109	0.1	0.06	<0,1	<0,002	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01
UZ-03-311001-WS													
UZ-03-311001-B	503.6	515	370	15	40	36	24	27	43	28	34	0.4	50
UZ-03-311001-V	56.4	17.4	64	<1	<5	0.6	<5	<1.2	<1.5	1.9	1.2	<0,05	<4
UZ-03-311001-S	579.8	399.2	500	14	41	45	28	31	43	35	38	0.5	69
UZ-04-251001-WD	0.231	0.089	0.09	0.04	<0,1	0.02	<0,01	<0,01	0.02	0.04	<0,01	<0,01	<0,01
UZ-04-251001-WS													
UZ-04-251001-B	418.7	472.1	360	6	16	20	15	18	25	16	16	0.3	37
UZ-04-251001-V	75.3	19.7	90	1.1	<5	2.4	1.4	2.2	5	3.2	3	0.08	12
UZ-04-251001-S	488.5	472.1	500	12	40	28	20	24	34	24	32	0.4	50

Provisional Data

Analysis performed by Uzbekistan Institute of Nuclear Physics

Sample ID	Beta activity (Bk/kg)	Alpha activity (Bk/kg)	K-40	Tl-208	Bi-212	Pb-212	Bi-214	Pb-214	Ra-226	Ac-228	Th-232	U-235	U-238
UZ-05-231001-WD	0.406	0.191	0.09	0.06	<0,1	0.007	<0,01	<0,01	0.02	0.01	<0,01	<0,01	<0,01
UZ-05-231001-WS													
UZ-05-231001-B	401.4	577.9	350	11	32	28	23	24	46	24	28	0.4	50
UZ-05-231001-V	154.7	102.5	140	6	10	9.5	8.5	10	20	22	17	0.4	53
UZ-05-231001-S	527.9	313.3	415	11	38	29	23	26	43	23	31	0.3	44
UZ-06-231001-WD	0.416	0.175	0.007	0.04	<0,1	0.002	<0,01	0.01	<0,01	0.02	<0,01	<0,01	<0,01
UZ-06-231001-WS													
UZ-06-231001-B	412.5	515	410	8	22	23	18	19	27	21	22	0.2	32
UZ-06-231001-V	103.4	20.1	102	2.3	<5	1.9	1.7	1.7	2.9	3.2	2.9	0.08	12
UZ-06-231001-S	547.4	313.3	490	10	34	27	19	24	36	22	28	0.4	50
UZ-07-251001-WD	0.393	0.217	0.007	<0,03	<0,1	0.008	<0,01	<0,01	0.03	0.05	<0,01	<0,01	<0,01
UZ-07-251001-WS													
UZ-07-251001-B	1077.6	1987.2	870	29	87	86	82	95	150	71	79	1.1	160
UZ-07-251001-V	137.6	71.6	150	2.9	7.2	6.8	4.5	5.2	10	6.3	6.7	0.1	17
UZ-07-251001-S	1451.9	1858.4	1160	39	111	109	141	160	247	91	101	1.7	239
UZ-08-251001-WD	0.164	0.095	0.008	0.05	<0,002	<0,002	0.03	0.002	<0,01	0.004	<0,01	<0,01	<0,01
UZ-08-251001-WS													
UZ-08-251001-B	822.3	1931.4	400	18	45	50	30	34	60	41	43	0.6	90
UZ-08-251001-V	102.1	63.8	90	3.3	8.2	6.7	4.5	4.7	9.1	9	8.6	0.1	17
UZ-08-251001-S	1015.3	1103	960	33	97	100	50	58	92	77	87	0.9	124
UZ-09-231001-WD	0.321	0.09	0.07	<0,03	<0,01	0.003	<0,01	<0,01	0.03	<0,01	<0,01	<0,01	<0,01
UZ-09-231001-WS													

Sample ID	Beta activity (Bk/kg)	Alpha activity (Bk/kg)	K-40	Tl-208	Bi-212	Pb-212	Bi-214	Pb-214	Ra-226	Ac-228	Th-232	U-235	U-238
UZ-09-231001-B	494.5	356.2	180	22	59	34	26	28	46	63	61	1	140
UZ-09-231001-V	128.7	61.4	92	3.1	6.4	3.6	3.1	3.6	4.6	11	8.7	0.2	25
UZ-09-231001-S	786.5	944.2	850	25	82	73	34	41	71	56	69	0.6	91
UZ-10-191001-WD	0.092	0.037	0.07	0.04	<0.1	0.002	<0.01	<0.01	0.03	<0.01	<0.01	<0.01	<0.01
UZ-10-191001-WS													
UZ-10-191001-B	848.7	901.3	330	11	31	29	16	18	32	28	30	0.4	52
UZ-10-191001-V	297.1	262.9	180	7.6	18	21	10	10	20	24	21	0.3	38
UZ-10-191001-S	631.1	1330.5	650	16	50	52	27	31	48	41	45	0.5	68
UZ-11-191001-WD	0.055	0.065	0.008	<0.03	<0.1	0.006	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	<0.01
UZ-11-191001-WS													
UZ-11-191001-B	875.9	759.7	340	11	36	31	18	20	31	26	31	0.3	40
UZ-11-191001-V	99.5	35.8	85	2	6.1	4.5	3.2	3	5.4	6	6.1	0.1	20
UZ-11-191001-S	525.8	699.6	600	15	40	49	28	32	49	42	41	0.5	73
UZ-12-191001-WD	0.231	0.018	0.08	<0.03	<0.1	0.002	<0.01	<0.01	0.09	<0.01	<0.01	<0.01	<0.01
UZ-12-191001-WS													
UZ-12-191001-B	767.3	699.6	580	12	37	30	16	17	26	26	32	0.3	37
UZ-12-191001-V	118.3	55.8	52	1.7	4.7	3.3	2.4	2.3	3.9	4.3	4.5	0.09	14
UZ-12-191001-S	739.8	588	680	16	53	46	25	27	39	37	45	0.5	67
UZ-13-301001-WD	0.075	0.038	0.08	0.04	<0.1	<0.15	<0.01	0.01	<0.01	0.04	<0.01	<0.01	<0.01

Provisional Data**Analysis performed by Uzbekistan Institute of Nuclear Physics**

Sample ID	Beta activity (Bk/kg)	Alpha activity (Bk/kg)	K-40	Tl-208	Bi-212	Pb-212	Bi-214	Pb-214	Ra-226	Ac-228	Th-232	U-235	U-238
UZ-13-301001-WS													
UZ-13-301001-B	606.7	545.1	400	10	30	33	24	27	38	24	27	0.4	50
UZ-13-301001-V	311.9	194.5	110	5.4	16	14	12	15	20	14	15	0.2	35
UZ-13-301001-S	421.2	386.3	450	12	35	38	29	36	48	33	34	0.4	61
UZ-14-301001-WD	0.107	0.154	0.09	0.06	<0,1	0.01	<0,01	<0,01	0.03	<0,01	<0,01	<0,01	<0,01
UZ-14-301001-WS													
UZ-14-301001-B	591.2	472.1	380	13	41	38	28	32	45	29	35	0.4	52
UZ-14-301001-V	234.5	97.8	135	2.5	7.7	4.8	3.6	3.9	5	6	6-Sep	0.03	4
UZ-14-301001-S	459.1	459.2	470	13	35	44	34	37	60	35	35	0.6	84
UZ-15-301001-WD	0.568	0.213	0.1	0.03	<0,1	<0,002	<0,01	<0,01	0.01	<0,004	<0,01	<0,01	<0,01
UZ-15-301001-WS													
UZ-15-301001-B	616.2	545.1	380	10	28	31	22	28	38	25	27	0.4	50
UZ-15-301001-V	125.5	23	84	0.7	<5	12	1	1.3	2.2	1.9	2	0.07	10
UZ-15-301001-S	590.8	442.1	513	18	58	37	30	36	46	32	45	0.4	62

B.2.34 Uzbekistan Metals, Fall 2000
Ag through Mn

Sample ID	Ag	Au	Ba	Br	Ca	Co	Cr	Cu	Cs	Fe	Hg	K	La	Mg	Mn
UZ-01-311001-WD	<0,1	0.51	175	130	214000	0.16	0.69	<100	<0,01	92	<0,01	nd	<1	24956	107
UZ-01-311001-WS															
UZ-01-311001-B	<0,1	0.028	414	<1	64250	9.3	12	nd	2	22126	<0,01	11800	36	nd	500
UZ-01-311001-V	<0,1	<0,001	32	15	1764	0.33	1.9	236	0.092	607	<0,01	11430	0.53	nd	72
UZ-01-311001-S	<0,1	<0,001	300	<1	54730	7.2	43	nd	1.4	18255	<0,01	14100	50	nd	458
UZ-02-311001-WD	<0,1	0.42	105	110	185200	0.19	0.46	<100	<0,01	88	<0,01	nd	<1	39736	<10
UZ-02-311001-WS															
UZ-02-311001-B	<0,1	<0,001	465	<1	76100	11	35	nd	<0,1	40815	<0,01	13970	73	nd	947
UZ-02-311001-V	<0,1	<0,001	59	10	14514	0.75	3.5	240	0.27	1788	<0,01	13333	1.5	nd	49
UZ-02-311001-S	<0,1	0.022	<100	<1	54420	17	66	nd	5	31718	<0,01	23200	32	nd	906
UZ-03-311001-WD	<0,1	0.45	126	94	99200	0.21	0.63	2100	<0,01	95	<0,01	nd	<1	38930	38
UZ-03-311001-WS															
UZ-03-311001-B	<0,1	0.024	166	<1	60570	11	16	nd	4.7	22790	<0,01	21780	34	nd	650
UZ-03-311001-V	<0,1	<0,001	12	5.6	13060	0.41	1.8	224	0.073	627	<0,01	7710	0.5	nd	31
UZ-03-311001-S	<0,1	<0,001	325	<1	59650	13	51	nd	3.5	25140	<0,01	20860	53	nd	670
UZ-04-251001-WD	<0,1	0.31	139	58	100000	0.22	1	390	<0,01	44	<0,01	nd	3.4	25365	15
UZ-04-251001-WS															
UZ-04-251001-B	<0,1	<0,001	650	<1	50900	7.1	27	nd	2.7	15360	<0,01	14500	58	nd	426
UZ-04-251001-V	<0,1	<0,001	425	35	28440	6.5	25	456	1.8	11474	0.14	29726	15	nd	695
UZ-04-251001-S	<0,1	<0,001	420	<1	54880	7.9	75	nd	3	16347	<0,01	16160	28	nd	400

Provisional Data

Analysis performed by Uzbekistan Institute of Nuclear Physics

Sample ID	Ag	Au	Ba	Br	Ca	Co	Cr	Cu	Cs	Fe	Hg	K	La	Mg	Mn
UZ-05-231001-WD	<0,1	0.76	128	91	153600	0.12	0.62	<100	<0,01	18	<0,01	nd	<1	56680	18
UZ-05-231001-WS															
UZ-05-231001-B	<0,1	0.049	506	<1	67720	8.9	15	nd	4.8	18216	<0,01	13600	35	nd	440
UZ-05-231001-V	<0,1	<0,001	465	25	10466	7.5	37	1040	2.6	13550	<0,01	18350	15	nd	2270
UZ-05-231001-S	<0,1	<0,001	410	<1	64665	5.7	34	nd	2	15366	<0,01	16660	31	nd	456
UZ-06-231001-WD	<0,1	1.1	115	80	174000	0.22	0.89	<100	<0,01	47	<0,01	nd	4.2	57487	<10
UZ-06-231001-WS															
UZ-06-231001-B	<0,1	<0,001	587	<1	47510	7.1	12	nd	3.6	16735	<0,01	21300	26	nd	420
UZ-06-231001-V	<0,1	<0,001	130	17	29940	2.7	28	840	0.73	4835	<0,01	33777	9.3	nd	1488
UZ-06-231001-S	<0,1	<0,001	520	<1	54500	6.5	37	nd	3.4	16042	<0,01	16270	24	nd	490
UZ-07-251001-WD	<0,1	0.35	208	21	43200	0.19	1.4	310	<0,01	32	<0,01	nd	<1	<10000	15
UZ-07-251001-WS															
UZ-07-251001-B	<0,1	<0,001	656	<1	31200	7	30	nd	9	16910	<0,01	34660	46	nd	577
UZ-07-251001-V	<0,1	0.026	888	15	34860	8.9	35	510	11	20415	0.42	30500	40	nd	628
UZ-07-251001-S	<0,1	<0,001	540	<1	<1000	4.4	6.5	nd	7.8	14640	<0,01	30900	42	nd	560
UZ-08-251001-WD	<0,1	1.1	147	23	147600	0.28	1.2	200	<0,01	74	<0,01	nd	<1	<10000	13
UZ-08-251001-WS															
UZ-08-251001-B	<0,1	0.031	820	<1	31130	11	30	nd	10	26720	<0,01	30400	45	nd	464
UZ-08-251001-V	<0,1	<0,001	770	16	5390	9.8	31	586	6.5	22900	<0,01	27575	18	nd	972
UZ-08-251001-S	5.8	<0,001	630	<1	19970	6.8	19	nd	8	26410	<0,01	31150	47	nd	516
UZ-09-231001-WD	<0,1	0.28	124	58	79600	0.2	1.5	<100	<0,01	92	<0,01	nd	<1	10135	<10
UZ-09-231001-WS															
UZ-09-231001-B	<0,1	<0,001	430	<1	196350	3.2	4.9	nd	2.5	6966	<0,01	7200	11	nd	557

Provisional Data

Analysis performed by Uzbekistan Institute of Nuclear Physics

Sample ID	Ag	Au	Ba	Br	Ca	Co	Cr	Cu	Cs	Fe	Hg	K	La	Mg	Mn
UZ-09-231001-V	0.45	<0,001	132	15	38270	1.3	6.6	395	0.45	2690	0.08	18330	4.2	nd	820
UZ-09-231001-S	<0,1	<0,001	640	<1	30000	5.1	15	nd	4.4	14140	<0,01	30000	37	nd	413
UZ-10-191001-WD	<0,1	0.3	160	10	55200	0.16	0.36	<100	0.031	32	<0,01	nd	<1	<10000	14
UZ-10-191001-WS															
UZ-10-191001-B	<0,1	<0,001	568	<1	59000	8.1	22	nd	5	20460	<0,01	14370	36	nd	625
UZ-10-191001-V	<0,1	<0,001	880	46	40000	12	37	840	4.3	23520	0.22	<500	20	nd	1680
UZ-10-191001-S	<0,1	<0,001	462	<1	28240	10	<10	nd	4.4	19547	<0,01	25680	270	nd	600
UZ-11-191001-WD	25	0.41	48	12	46800	0.16	0.86	<100	0.033	41	<0,01	nd	<1	<10000	21
UZ-11-191001-WS															
UZ-11-191001-B	<0,1	<0,001	606	<1	54700	10	21	nd	5.6	22360	<0,01	14400	42	nd	410
UZ-11-191001-V	<0,1	<0,001	190	9	36850	3.7	14	420	0.91	5830	0.055	15300	7.8	nd	530
UZ-11-191001-S	<0,1	<0,001	690	<1	66240	7.9	25	nd	3.4	15627	<0,01	14960	38	nd	527
UZ-12-191001-WD	<0,1	0.31	124	20	63600	0.2	0.8	<100	<0,01	<10	<0,01	nd	4.1	10287	14
UZ-12-191001-WS															
UZ-12-191001-B	<0,1	<0,001	650	<1	50910	4.8	13	nd	3.5	13940	<0,01	26470	20	nd	236
UZ-12-191001-V	<0,1	<0,001	277	7.2	49260	1.2	3.2	400	0.34	2310	<0,01	14165	4.2	nd	380
UZ-12-191001-S	<0,1	<0,001	735	<1	55360	5.3	13	nd	2.8	17740	<0,01	22300	29	nd	452
UZ-13-301001-WD	<0,1	0.26	43	19	<500	0.17	1.2	260	<0,01	79	<0,01	nd	<1	<10000	19
UZ-13-301001-WS															
UZ-13-301001-B	<0,1	0.02	900	<1	31610	7.9	13	nd	4.2	17855	<0,01	15460	34	nd	345
UZ-13-301001-V	<0,1	<0,001	1128	7.5	1545	8.8	38	360	3.4	17856	1.5	12040	15	nd	337
UZ-13-301001-S	3.9	<0,001	1240	<1	48045	7	43	nd	4.7	19876	<0,01	13770	59	nd	413
UZ-14-301001-WD	<0,1	0.39	62	44	67600	0.18	<0,1	<100	<0,01	41	<0,01	nd	2.8	<10000	14

Provisional Data**Analysis performed by Uzbekistan Institute of Nuclear Physics**

Sample ID	Ag	Au	Ba	Br	Ca	Co	Cr	Cu	Cs	Fe	Hg	K	La	Mg	Mn
UZ-14-301001-WS															
UZ-14-301001-B	<0,1	<0,001	570	<1	47070	7.2	16	nd	4.7	17810	<0,01	15000	41	nd	396
UZ-14-301001-V	<0,1	<0,001	160	7	8630	2.2	11	350	0.77	3910	<0.01	24026	6.1	nd	390
UZ-14-301001-S	<0,1	<0,001	700	<1	40100	8.6	64	nd	5.5	19740	<0,01	15950	37	nd	464
UZ-15-301001-WD	<0,1	0.27	64	110	240000	1.9	1.4	<100	0.044	<10	<0,01	nd	<1	98686	26
UZ-15-301001-WS															
UZ-15-301001-B	<0,1	<0,001	756	<1	55460	12	48	nd	7.2	25265	<0,01	18800	36	nd	460
UZ-15-301001-V	<0,1	0.0091	68	2.6	14760	1	11	400	0.35	2280	0.091	18467	2.7	nd	293
UZ-15-301001-S	<0,1	<0,001	565	<1	53680	8.6	46	nd	5.2	19315	<0,01	15180	32	nd	450

B.2.35Uzbekistan Metals, Fall 2001
Na through U

Sample ID	Na	Ni	Rb	Sb	Sc	Se	Th	Zn	U
UZ-01-311001-WD	207406	55	1.1	1.2	0.044	0.8	<0,1	80	12
UZ-01-311001-WS									
UZ-01-311001-B	12960	<40	66	1.3	11	<0,1	13	nd	6.21
UZ-01-311001-V	4650	<40	2.7	0.14	0.19	0.54	0.46	nd	<0,1
UZ-01-311001-S	13150	<40	37	2.4	10	<0,1	22	nd	3.8
UZ-02-311001-WD	207200	32	2	0.87	0.038	0.55	<0,1	19	<1
UZ-02-311001-WS									
UZ-02-311001-B	13513	<40	36	2.2	17	<0,1	35	nd	7.3
UZ-02-311001-V	9820	<40	3.8	0.17	0.59	0.1	0.94	nd	<0,12
UZ-02-311001-S	12458	<40	85	2	14	<0,1	17	nd	2.2
UZ-03-311001-WD	171300	44	<1	0.71	0.055	1.2	<0,1	21	<1
UZ-03-311001-WS									
UZ-03-311001-B	15456	<40	39	<1	11	<0,1	16	nd	2.5
UZ-03-311001-V	7160	<40	1.9	0.1	0.21	1.6	0.35	nd	<0,5
UZ-03-311001-S	16200	<40	78	<0,5	12	<0,1	16	nd	3.1
UZ-04-251001-WD	70200	<30	2.9	0.4	0.031	1.4	<0,1	12	25
UZ-04-251001-WS									
UZ-04-251001-B	7670	<40	52	1.2	7.1	<0,1	27	nd	4.8
UZ-04-251001-V	4930	<40	39	0.78	3.7	1.6	8	nd	1.6
UZ-04-251001-S	8820	<40	64	<0,5	7.3	<0,1	11	nd	2.7

Provisional Data**Analysis performed by Uzbekistan Institute of Nuclear Physics**

Sample ID	Na	Ni	Rb	Sb	Sc	Se	Th	Zn	U
UZ-05-231001-WD	130800	<30	<1	0.57	0.029	1.2	<0,1	12	12
UZ-05-231001-WS									
UZ-05-231001-B	9090	<40	47	1.6	8.6	<0,1	15	nd	3.1
UZ-05-231001-V	3886	<40	38	1.5	3.9	3.5	9.5	nd	3
UZ-05-231001-S	8910	<40	28	1.5	6	<0,1	9.1	nd	2
UZ-06-231001-WD	122100	53	<1	0.71	0.029	1.5	<0,1	8.4	23
UZ-06-231001-WS									
UZ-06-231001-B	11940	<40	79	1.4	6.8	<0,1	12	nd	2.7
UZ-06-231001-V	6900	<40	12	0.32	1.3	1.3	5.9	nd	2.6
UZ-06-231001-S	11930	<40	77	1.3	6.6	<0,1	12	nd	2.5
UZ-07-251001-WD	9480	<30	<1	0.46	0.033	<0,1	<0,1	11	41
UZ-07-251001-WS									
UZ-07-251001-B	14418	<40	134	3	7.5	<0,1	30	nd	9.8
UZ-07-251001-V	7423	<40	90	3.1	7.3	3.5	17	nd	2.3
UZ-07-251001-S	17590	<40	162	3	4.8	<0,1	36	nd	6.3
UZ-08-251001-WD	13300	<30	1.3	0.61	0.037	<0,1	<0,1	11	17
UZ-08-251001-WS									
UZ-08-251001-B	13316	<40	130	2.9	10	<0,1	30	nd	6.9
UZ-08-251001-V	5200	<40	8.8	2	7.7	1	20	nd	2
UZ-08-251001-S	16170	<40	132	6.7	8.9	<0,1	34	nd	4
UZ-09-231001-WD	52280	<30	1.7	0.58	0.068	0.84	<0,1	26	17
UZ-09-231001-WS									
UZ-09-231001-B	2355	<40	27	0.3	3.1	<0,1	4.9	nd	5.2

Sample ID	Na	Ni	Rb	Sb	Sc	Se	Th	Zn	U
UZ-09-231001-V	3410	<40	8.4	0.35	0.86	0.7	2.4	nd	1.2
UZ-09-231001-S	18000	<40	98	2.1	5.8	<0,1	24	nd	4.9
UZ-10-191001-WD	4130	<30	<1	0.33	0.038	<0,1	<0,1	6	9.4
UZ-10-191001-WS									
UZ-10-191001-B	8984	<40	69	1.5	7.6	<0,1	22	nd	5.2
UZ-10-191001-V	7100	<40	74	1.8	6.2	4.6	18	nd	4.4
UZ-10-191001-S	11800	<40	77	2.7	8	<0,1	500	nd	<1
UZ-11-191001-WD	15670	<30	1	0.33	0.026	0.24	<0,1	17	6.6
UZ-11-191001-WS									
UZ-11-191001-B	10256	<40	80	2.1	8.9	<0,1	21	nd	3.3
UZ-11-191001-V	666	<40	17	0.31	1.7	0.87	4	nd	1.4
UZ-11-191001-S	10000	<40	74	1.5	6.6	<0,1	22	nd	3.1
UZ-12-191001-WD	19220	<30	<1	0.4	0.17	<0,1	<0,1	970	7.1
UZ-12-191001-WS									
UZ-12-191001-B	19700	<40	106	2	4.3	<0,1	13	nd	<1
UZ-12-191001-V	6226	<40	13	0.16	0.6	0.5	2.3	nd	1
UZ-12-191001-S	15130	<40	100	2.1	5.4	<0,1	20	nd	<1
UZ-13-301001-WD	16120	<30	3.8	14	0.035	<0,1	<0,1	32	7
UZ-13-301001-WS									
UZ-13-301001-B	8710	<40	74	11	8.1	<0,1	13	nd	<1
UZ-13-301001-V	3444	<40	41	17	5.3	4.8	18	nd	1.7
UZ-13-301001-S	10266	<40	68	9.7	8.4	<0,1	20	nd	2.9
UZ-14-301001-WD	44840	<30	<1	18	0.025	2.5	<0,1	9.3	8.6

Provisional Data**Analysis performed by Uzbekistan Institute of Nuclear Physics**

Sample ID	Na	Ni	Rb	Sb	Sc	Se	Th	Zn	U
UZ-14-301001-WS									
UZ-14-301001-B	4816	<40	81	5.8	8.1	<0,1	16	nd	4.5
UZ-14-301001-V	3620	<40	15	1.9	1.3	0.8	3.3	nd	0.75
UZ-14-301001-S	12200	<40	70	7.7	8.8	<0,1	16	nd	2.5
UZ-15-301001-WD	207200	97	2.4	2.1	0.018	<0,1	<0,1	13	28
UZ-15-301001-WS									
UZ-15-301001-B	8320	<40	73	5.6	11	<0,1	17	nd	3.2
UZ-15-301001-V	4325	<40	5.5	0.61	0.55	1.3	1.2	nd	2.7
UZ-15-301001-S	18018	<40	58	2.6	9	<0,1	16	nd	2.4

B.3 Consolidated Data Listings—Kazakh Analysis

The following data listings represent the preliminary results of analysis of Navruz water samples by the Institute of Nuclear Physics of the Republic of Kazakhstan. Do not use these data for further research or publication before consulting with the Principle Investigator. For more information, refer to the Navruz project web site www.cmc.sandia.gov/Central/centralasia.html.

Units

Unless otherwise stated, the units for all of the tables in this Appendix are as follows:

Measurement	Units
Dissolved radionuclides	milliBequerel/liter (mBq/l)
Suspended radionuclides	milliBequerel/liter (mBq/l)
Bottom sediments radionuclides	Bequerel/kilogram (Bq/kg)
Soils radionuclides	Bequerel/kilogram (Bq/kg)
Vegetation radionuclides	Bequerel/kilogram (Bq/kg)
Dissolved and suspended metals	microgram/liter ($\mu\text{g}/\text{l}$)
Sediment, soil, and vegetation metals	percent by weight (%) or gram/tonne (g/t)

B.3.1 Kazakhstan Water (Suspended) Radionuclide Data, Fall 2000
 ^{40}K through ^{214}Bi

Sample code	K-40 mBq/l	Cs-137 mBq/l	Tl-208 mBq/l	Pb-210 mBq/l	Bi-212 mBq/l	Pb-212 mBq/l	Bi-214 mBq/l
KZ-10-031200-WS-TB	26 ± 13	< 0.8	< 2.0	< 3.4	< 10	< 0.6	12.0 ± 1.7
KZ-01-091200-WS	100 ± 27	< 1.2	< 3.9	< 6.1	< 22	3.0 ± 0.8	10.6 ± 2.7
KZ-02-081200-WS	< 44	< 1.8	< 4.0	< 5.3	< 24	< 1.3	10.9 ± 3.3
KZ-03-101200-WS	179 ± 33	< 1.7	8 ± 3	< 6.5	< 23	6.3 ± 1.0	13.3 ± 3.0
KZ-04-101200-WS	297 ± 33	2.1 ± 1.1	11 ± 3	8.0 ± 4.0	< 24	14.8 ± 1.1	18.3 ± 2.9
KZ-05-111200-WS	54 ± 18	1.3 ± 0.8	5.0 ± 1.9	36 ± 4	< 13	2.3 ± 0.6	8.4 ± 1.9
KZ-06-071200-WS	66 ± 26	< 1.7	< 3.8	< 5.6	< 20	1.4 ± 0.7	5.4 ± 2.5
KZ-07-051200-WS	87 ± 15	< 0.8	4.2 ± 1.4	< 3.2	< 12	4.0 ± 0.5	6.1 ± 1.3
KZ-08-041200-WS	149 ± 28	< 1.5	6 ± 3	< 5.8	< 20	5.3 ± 0.8	9.6 ± 2.4
KZ-09-031200-WS	168 ± 25	< 1.3	8 ± 2	< 5.0	< 19	7.5 ± 0.8	12.2 ± 2.2
KZ-10-031200-WS	103 ± 21	< 1.1	5 ± 2	< 4.6	< 17	4.4 ± 0.6	7.6 ± 2.0
KZ-11-021200-WS	451 ± 50	< 2.1	22 ± 5	16.5 ± 5.8	< 32	19.9 ± 1.6	28.8 ± 4.3
KZ-12-011200-WS	390 ± 41	2.4 ± 1.2	17 ± 4	12.0 ± 4.8	39 ± 18	18.9 ± 1.4	23.0 ± 3.4
KZ-13-011200-WS	426 ± 32	< 1.2	21 ± 3	15.7 ± 3.8	30 ± 13	22.9 ± 1.1	25.2 ± 2.7
KZ-14-301100-WS	179 ± 48	3.1 ± 1.7	11 ± 5	< 9.9	< 26	10.1 ± 1.6	20.7 ± 4.8
KZ-15-291100-WS	96 ± 20	< 1.1	4 ± 2	< 4.5	< 16	3.2 ± 0.6	9.8 ± 2.0

Kazakhstan Water (Suspended) Radionuclide Data, Fall 2000, continued

^{214}Pb through ^{235}U

Sample code	Pb-214 mBq/l	Ra-224 mBq/l	Ra-226 mBq/l	Th-227 mBq/l	Ac-228 mBq/l	Th-234 mBq/l	U-235 mBq/l
KZ-10-031200-WS-TB	8.0 ± 0.7	< 7	< 11	< 1.5	< 3.2	< 2.5	< 0.6
KZ-01-091200-WS	9.9 ± 1.2	< 12	< 19	< 2.4	6.4 ± 3.6	< 4.8	< 1.1
KZ-02-081200-WS	8.1 ± 1.4	< 41	< 20	< 2.9	< 5.1	< 5.5	< 1.2
KZ-03-101200-WS	11.6 ± 1.3	< 38	< 21	< 2.7	11 ± 4	7 ± 3	< 1.2
KZ-04-101200-WS	17.3 ± 1.3	< 38	25 ± 13	< 2.5	22 ± 5	8 ± 3	< 1.2
KZ-05-111200-WS	8.1 ± 0.9	< 25	< 14	< 1.7	5 ± 3	< 3.7	< 0.8
KZ-06-071200-WS	5.7 ± 1.1	< 34	< 19	< 2.7	< 5.5	< 4.2	< 1.1
KZ-07-051200-WS	6.5 ± 0.6	< 19	< 10	< 1.3	5.5 ± 1.9	< 2.6	< 0.6
KZ-08-041200-WS	10.1 ± 1.1	< 35	< 19	< 2.3	< 5.8	< 4.7	< 1.0
KZ-09-031200-WS	11.8 ± 1.0	< 30	< 16	< 2.0	11 ± 3	< 4.3	< 0.9
KZ-10-031200-WS	9.7 ± 0.9	< 27	< 14	< 1.8	7.9 ± 2.8	4 ± 2	< 0.8
KZ-11-021200-WS	25.0 ± 1.9	< 55	47 ± 18	< 3.5	26.3 ± 6.4	12 ± 5	< 1.6
KZ-12-011200-WS	22.3 ± 1.6	< 47	35 ± 15	< 2.8	32.2 ± 5.7	12 ± 4	< 1.4
KZ-13-011200-WS	23.8 ± 1.2	< 37	43 ± 12	< 2.3	30.0 ± 4.3	16 ± 3	< 1.1
KZ-14-301100-WS	15.5 ± 2.1	< 59	< 32	< 3.8	19.1 ± 7.1	< 8.0	< 1.8
KZ-15-291100-WS	8.8 ± 0.9	< 27	< 15	< 1.9	< 4.4	< 3.7	< 0.8

B.3.2 Kazakhstan Water (Suspended) Radionuclide Data, Spring 2001
 ^{40}K through ^{214}Bi

Sample Code	Sample Volume, l	Sample Mass, g	K-40 mBq/l	Cs-137 mBq/l	Tl-208 mBq/l	Pb-210 mBq/l	Bi-212 mBq/l	Pb-212 mBq/l	Bi-214 mBq/l
KZ-01-130601-WS	15.0	0.566	54 ± 24	< 1.4	< 3.8	< 4.6	< 21	1.6 ± 0.7	8.5 ± 2.5
KZ-02-130601-WS	15.0	0.121	< 27	< 1.2	< 2.6	< 3.8	< 16	1.0 ± 0.5	7.2 ± 2.1
KZ-02-130601-WSD	15.0	0.184	26 ± 10	< 0.7	< 1.6	< 2.3	< 9.4	0.5 ± 0.3	4.8 ± 1.2
KZ-03-150601-WS	15.0	3.174	233 ± 49	< 2.0	7.8 ± 3.9	11.0 ± 5.4	< 36	9.5 ± 1.4	24.3 ± 4.7
KZ-04-150601-WS	15.0	0.675	78 ± 30	< 1.6	< 4.5	< 6.3	< 23	3.5 ± 0.9	< 3.8
KZ-05-150601-WS	15.0	0.625	70 ± 24	< 1.0	3.5 ± 2.0	< 4.5	< 14	< 0.9	< 3.0
KZ-06-180601-WS	15.0	1.076	78 ± 27	< 1.2	< 3.9	< 5.2	< 23	4.2 ± 0.9	6.8 ± 2.5
KZ-07-110601-WS	15.0	0.214	42 ± 10	0.6 ± 0.4	< 1.3	< 2.2	< 6.5	0.9 ± 0.3	4.3 ± 1.0
KZ-08-100601-WS	15.0	1.617	118 ± 19	< 0.9	6.5 ± 1.8	< 3.7	< 13	6.2 ± 0.6	10.3 ± 1.8
KZ-09-090601-WS	15.0	1.983	119 ± 36	< 2.0	8.2 ± 3.6	9.3 ± 4.8	< 19	8.1 ± 1.3	15.7 ± 3.8
KZ-10-080601-WS	15.0	2.241	182 ± 38	< 1.3	11.5 ± 3.5	< 6.9	< 28	9.4 ± 1.3	13.6 ± 3.3
KZ-10-080601-WSD	15.0	2.162	149 ± 40	< 2.1	7.0 ± 3.5	< 7.0	< 31	8.4 ± 1.3	8.9 ± 3.3
KZ-11-0706901-WS	15.0	2.380	139 ± 37	< 2.1	8.5 ± 3.3	< 7.0	< 26	9.3 ± 1.3	17.0 ± 3.7
KZ-12-060601-WS	15.0	1.443	101 ± 31	< 1.7	7.9 ± 3.1	< 6.3	< 23	6.4 ± 1.1	15.8 ± 3.3
KZ-13-150601-WS	15.0	1.045	60 ± 24	< 1.3	< 3.7	< 4.9	< 18	3.4 ± 0.8	6.7 ± 2.3
KZ-14-040601-WS	15.0	0.412	< 42	< 1.2	< 3.7	< 5.7	< 23	2.7 ± 0.8	7.1 ± 2.7
KZ-15-030601-WS	15.0	0.432	62 ± 28	< 1.6	4.5 ± 2.5	< 5.6	< 23	2.5 ± 0.8	4.3 ± 2.5
KZ-TB-010601-WS	15.0	0.010	< 28	< 1.2	< 2.9	< 4.1	< 16	< 0.7	6.7 ± 2.2

Kazakhstan Water (Suspended) Radionuclide Data, Spring 2001, continued

^{214}Pb through ^{235}U

Sample Code	Th-234 mBq/l	Ra-226 mBq/l	Pb-214 mBq/l	Ac-228 mBq/l	Ra-224 mBq/l	U-235 mBq/l	Th-227 mBq/l
KZ-01-130601-WS	< 3.8	< 16	7.2 ± 1.1	< 5.2	< 33	< 0.9	< 2.1
KZ-02-130601-WS	< 3.6	< 12	7.8 ± 1.0	< 3.4	< 25	< 0.8	< 1.8
KZ-02-130601-WSD	< 2.0	< 8	5.1 ± 0.5	2.4 ± 1.4	< 15	< 0.5	< 1.0
KZ-03-150601-WS	< 7.8	< 27	22.5 ± 2.2	15.7 ± 6.6	< 55	< 1.6	< 3.3
KZ-04-150601-WS	< 5.2	< 17	4.1 ± 1.1	< 6.9	< 36	< 1.1	< 2.3
KZ-05-150601-WS	< 3.7	< 15	3.9 ± 0.9	< 4.2	< 26	< 0.9	< 2.0
KZ-06-180601-WS	< 4.8	< 17	6.6 ± 1.1	8.7 ± 4.1	< 32	< 1.0	< 2.1
KZ-07-110601-WS	< 1.7	< 92	3.6 ± 0.4	< 2.0	< 13	< 0.4	< 0.9
KZ-08-100601-WS	3.7 ± 2	< 12	9.8 ± 0.8	< 6.0	< 23	< 0.7	< 1.4
KZ-09-090601-WS	< 6.2	< 24	13.2 ± 1.7	15.0 ± 5.6	< 45	< 1.3	< 2.7
KZ-10-080601-WS	< 6.0	< 23	10.5 ± 1.4	8.9 ± 4.9	< 43	< 1.3	< 2.7
KZ-10-080601-WSD	< 6.4	< 26	10.8 ± 1.6	17.5 ± 6.2	< 44	< 1.4	< 2.9
KZ-11-070601-WS	9 ± 4	< 23	12.8 ± 1.6	11.9 ± 5.2	< 41	< 1.4	< 2.8
KZ-12-060601-WS	< 5.5	< 21	14.0 ± 1.5	< 6.5	< 42	< 1.2	< 2.5
KZ-13-150601-WS	< 4.2	< 15	5.8 ± 1.0	< 5.4	< 30	< 0.9	< 2.1
KZ-14-040601-WS	< 5.1	< 19	6.9 ± 1.2	< 5.1	< 38	< 1.1	< 2.4
KZ-15-030601-WS	< 5.0	< 18	5.6 ± 1.2	< 6.1	< 34	< 1.1	< 2.4
KZ-TB-010601-WS	< 3.6	< 13	6.1 ± 1.0	< 4.0	< 24	< 0.8	< 1.7

B.3.3 Kazakhstan Bottom Sediment Radionuclide Data, Spring 2001

Sample Code	K-40, Bq/kg	Cs-137, Bq/kg	Tl-208, Bq/kg	Pb-210, Bq/kg	Pb-212, Bq/kg	Bi-212, Bq/kg	Pb-214, Bq/kg	Bi-214, Bq/kg	Ra- 224, Bq/kg	Ra-226, Bq/kg	Th-227, Bq/kg	Ac-228, Bq/kg	Th-234, Bq/kg	U-235, Bq/kg
KZ-01-130601-B	622 ± 48	3.2 ± 1.2	41.6 ± 4.5	38 ± 11	47.5 ± 2.4	54 ± 15	36.7 ± 2.4	33.5 ± 3.1	55 ± 17	64 ± 18	< 5.6	49 ± 7	29 ± 8	1.9 ± 1.1
KZ-02-130601-B	620 ± 49	< 1.5	26.8 ± 4.1	29 ± 13	29.8 ± 2.1	40 ± 15	25.2 ± 2.1	20.5 ± 2.7	30 ± 15	45 ± 17	< 5.5	30 ± 6	17 ± 8	< 1.7
KZ-03-150601-B	812 ± 54	< 1.8	48 ± 5	47 ± 16	49.4 ± 2.6	66 ± 17	35.3 ± 2.4	34.1 ± 3.3	45 ± 17	45 ± 18	< 5.2	61 ± 8	32 ± 9	2.9 ± 1.2
KZ-04-150601-B	671 ± 48	< 1.6	44.8 ± 4.6	35 ± 14	44.5 ± 2.4	64 ± 16	32.3 ± 2.2	31.9 ± 3.1	46 ± 16	40 ± 17	< 5.4	51 ± 7	23 ± 8	3.0 ± 1.1
KZ-05-130601-B	494 ± 43	< 1.5	32.1 ± 4.1	23 ± 13	35.8 ± 2.1	42 ± 14	30.2 ± 2.2	30.6 ± 3.0	30 ± 15	39 ± 17	< 5.4	41 ± 6	24 ± 8	2.1 ± 1.0
KZ-06-180601-B	509 ± 48	2.0 ± 1.1	35.0 ± 4.6	44 ± 14	37.7 ± 2.4	42 ± 15	29.8 ± 2.3	27.7 ± 3.1	34 ± 17	61 ± 19	< 5.7	42 ± 7	28 ± 8	2.9 ± 1.2
KZ-07-110601-B	584 ± 46	< 1.4	32.2 ± 4.1	22 ± 12	29.3 ± 2.0	24 ± 13	24.3 ± 2.0	25.0 ± 2.7	38 ± 15	39 ± 16	< 5.4	32 ± 6	19 ± 8	< 1.6
KZ-08-100601-B	634 ± 48	< 1.5	31.7 ± 4.2	30 ± 14	37.9 ± 2.3	40 ± 14	31.7 ± 2.3	26.9 ± 2.9	35 ± 15	49 ± 17	< 5.5	44 ± 7	17 ± 8	< 1.7
KZ-09-090601-B	675 ± 50	< 1.5	33.1 ± 4.4	32 ± 13	35.7 ± 2.2	40 ± 15	31.0 ± 2.3	28.0 ± 3.0	42 ± 16	61 ± 17	< 5.5	37 ± 6	22 ± 8	< 1.7
KZ-10-080601-B	581 ± 42	< 1.3	33.5 ± 3.9	38 ± 11	39.4 ± 2.1	41 ± 13	27.7 ± 2.0	25.4 ± 2.6	35 ± 14	51 ± 16	< 4.7	36 ± 6	26 ± 7	2.5 ± 1.0
KZ-11-070601-B	596 ± 50	< 1.8	51 ± 5	35 ± 11	51.9 ± 2.6	53 ± 16	35.8 ± 2.5	34.4 ± 3.3	56 ± 18	57 ± 19	< 5.7	52 ± 7	31 ± 9	2.1 ± 1.2
KZ-12-060601-B	713 ± 49	< 1.3	26.0 ± 3.8	21 ± 11	29.5 ± 2.0	42 ± 14	22.5 ± 2.0	26.4 ± 2.8	< 24	49 ± 17	< 5.1	34 ± 6	28 ± 8	1.7 ± 1.0
KZ-13-050601-B	611 ± 21	< 0.6	22.8 ± 1.6	24 ± 6	25.0 ± 0.8	24 ± 6	19.3 ± 0.8	18.2 ± 1.1	25 ± 6	33 ± 7	< 2.2	27 ± 3	17 ± 3.	1.7 ± 0.4
KZ-14-040601-B	617 ± 48	< 1.7	40.9 ± 4.6	41 ± 11	43.8 ± 2.4	52 ± 15	34.7 ± 2.3	35.6 ± 3.2	39 ± 17	56 ± 18	< 5.6	44 ± 7	30 ± 8	1.8 ± 1.1
KZ-15-030601-B	663 ± 44	< 1.3	28.8 ± 3.7	27 ± 10	30.2 ± 1.9	44 ± 13	24.5 ± 1.9	22.6 ± 2.5	34 ± 14	55 ± 15	< 4.6	36 ± 6	29 ± 8	< 1.5

B.3.4 Kazakhstan Bottom Sediments Radionuclide Data, Spring 2002

Sample code	K-40 Bq/kg	Cs-137 Bq/kg	Tl-208 Bq/kg	Pb-210 Bq/kg	Pb-212 Bq/kg	Bi-212 Bq/kg	Pb-214 Bq/kg	Bi-214 Bq/kg	Ra-224 Bq/kg	Ra-226 Bq/kg	Th-227 Bq/kg	Ac-228 Bq/kg	Th-234 Bq/kg	U-235 Bq/kg
KZ-01-280502-B	607 ± 37	3.0 ± 0.9	55.5 ± 4.1	49 ± 9	55.1 ± 2.0	64 ± 13	30.1 ± 1.7	30.9 ± 2.4	49 ± 13	70 ± 14	< 4.5	67 ± 6	30 ± 7	1.9 ± 0.8
KZ-02-280502-B	613 ± 33	< 1.0	31.6 ± 2.9	30 ± 8	34.0 ± 1.5	43 ± 10	28.0 ± 1.5	24.7 ± 2.0	28 ± 11	59 ± 12	< 3.8	36.1 ± 4.3	32 ± 6	2.0 ± 0.7
KZ-03-310502-B	805 ± 38	< 1.1	40.7 ± 3.4	34 ± 9	41.8 ± 1.7	44 ± 11	27.9 ± 1.6	25.0 ± 2.1	42 ± 12	39 ± 13	< 4.0	49 ± 5	22 ± 6	2.5 ± 0.8
KZ-04-300502-B	613 ± 34	< 1.2	49.8 ± 3.7	42 ± 9	50.2 ± 1.8	39 ± 11	39.4 ± 1.8	36.2 ± 2.4	46 ± 12	69 ± 13	< 4.1	54 ± 5	36 ± 7	1.7 ± 0.8
KZ-05-050502-B	545 ± 33	< 1.1	22.9 ± 2.7	31 ± 8	28.6 ± 1.4	35 ± 10	27.2 ± 1.5	27.3 ± 2.1	< 17	47 ± 12	< 3.9	32.3 ± 4.3	22 ± 6	1.9 ± 0.7
KZ-06-260502-B	572 ± 33	3.0 ± 0.8	45.6 ± 3.5	44 ± 8	46.8 ± 1.7	60 ± 11	29.1 ± 1.6	26.0 ± 2.1	37 ± 11	66 ± 13	< 4.1	55 ± 5	23 ± 6	1.4 ± 0.7
KZ-07-250502-B	602 ± 35	1.6 ± 0.8	39.0 ± 3.4	46 ± 9	41.1 ± 1.7	55 ± 11	30.6 ± 1.7	29.3 ± 2.2	41 ± 12	54 ± 13	< 4.3	44.2 ± 4.9	26 ± 6	2.2 ± 0.8
KZ-08-210502-B	556 ± 35	< 1.2	41.0 ± 3.6	34 ± 9	43.4 ± 1.8	38 ± 11	32.5 ± 1.8	32.1 ± 2.4	49 ± 13	55 ± 13	< 4.2	45 ± 5	35 ± 7	2.5 ± 0.8
KZ-09-210502-B	590 ± 32	< 1.0	36.3 ± 3.1	27 ± 8	37.7 ± 1.6	48 ± 10	29.6 ± 1.5	28.3 ± 2.1	29 ± 11	54 ± 12	< 3.8	40.4 ± 4.4	21 ± 6	1.8 ± 0.7
KZ-10-220502-B	618 ± 33	< 1.0	28.4 ± 2.8	26 ± 8	32.3 ± 1.5	41 ± 10	23.6 ± 1.4	22.9 ± 1.9	19 ± 10	51 ± 12	< 3.9	34.0 ± 4.3	19 ± 6	< 1.1
KZ-11-190502-B	553 ± 32	< 1.1	38.5 ± 3.2	32 ± 8	40.6 ± 1.6	44 ± 10	30.5 ± 1.6	31.6 ± 2.2	39 ± 11	57 ± 13	< 3.9	43.1 ± 4.7	31 ± 6	2.2 ± 0.8
KZ-12-170502-B	620 ± 34	< 1.1	32.2 ± 3.1	27 ± 8	33.5 ± 1.5	30 ± 9	26.2 ± 1.5	23.7 ± 2.0	38 ± 11	44 ± 12	< 4.0	37.4 ± 4.5	23 ± 6	1.4 ± 0.7
KZ-13-180502-B	594 ± 29	< 1.0	44.2 ± 3.0	40 ± 7	46.4 ± 1.5	56 ± 10	31.2 ± 1.4	28.2 ± 1.9	46 ± 10	66 ± 11	< 3.4	56.4 ± 4.5	33 ± 6	1.6 ± 0.7
KZ-14-120502-B	668 ± 37	< 1.2	40.8 ± 3.6	35 ± 10	41.4 ± 1.8	45 ± 12	34.4 ± 1.8	35.5 ± 2.5	36 ± 12	63 ± 14	< 4.5	45 ± 5	32 ± 8	1.6 ± 0.8
KZ-15-090502-B	604 ± 34	< 1.2	40.5 ± 3.4	36 ± 8	41.7 ± 1.7	46 ± 11	29.3 ± 1.6	30.2 ± 2.2	56 ± 12	47 ± 13	< 4.1	44.4 ± 4.8	26 ± 6	2.4 ± 0.8

B.3.5 Kazakhstan Soils Radionuclide Data, Spring 2001

Sample Code	K-40 Bq/kg	Cs-137 Bq/kg	Tl-208 Bq/kg	Pb-210 Bq/kg	Pb-212 Bq/kg	Bi-212 Bq/kg	Pb-214 Bq/kg	Bi-214 Bq/kg	Ra-226 Bq/kg	Th-227 Bq/kg	Ac-228 Bq/kg	Ra-224 Bq/kg	Th-234 Bq/kg	U-235 Bq/kg
KZ-02-130601-S	581 ± 49	4.7 ± 1.3	35.0 ± 4.5	72 ± 17	42.3 ± 2.4	37 ± 14	33.9 ± 2.4	32.0 ± 3.2	54 ± 18	< 5.7	46 ± 7	43 ± 17	23 ± 8	2.1 ± 1.1
KZ-03-150601-S	666 ± 25	1.8 ± 0.5	45.1 ± 2.4	51 ± 8	48.5 ± 1.2	59 ± 8	34.2 ± 1.2	29.7 ± 1.5	55 ± 9	3.9 ± 1.8	55.2 ± 3.6	49 ± 8	28 ± 4.	2.2 ± 0.5
KZ-04-150601-S	757 ± 59	7.3 ± 1.7	46 ± 6	99 ± 19	48.9 ± 2.8	69 ± 20	34.0 ± 2.7	30.0 ± 3.5	47 ± 20	< 6.9	56 ± 8	61 ± 20	22 ± 9	< 2.0
KZ-05-130601-S	580 ± 48	6.6 ± 1.4	37.3 ± 4.5	74 ± 15	42.7 ± 2.3	65 ± 16	31.6 ± 2.3	30.8 ± 3.1	44 ± 17	< 5.4	40 ± 6	41 ± 16	22 ± 8	2.8 ± 1.1
KZ-06-180601-S	513 ± 43	1.9 ± 1.0	28.5 ± 3.8	58 ± 14	33.7 ± 2.0	35 ± 13	28.9 ± 2.1	26.9 ± 2.7	58 ± 16	< 5.2	39 ± 6	39 ± 15	20 ± 7	< 1.6
KZ-07-110601-S	510 ± 43	< 1.4	33.4 ± 4.0	40 ± 13	37.2 ± 2.1	39 ± 14	25.6 ± 2.0	28.6 ± 2.8	40 ± 15	< 5.3	40 ± 6	45 ± 15	25 ± 7	2.2 ± 1.0
KZ-08-100601-S	539 ± 46	2.0 ± 1.1	39.2 ± 4.5	44 ± 13	40.3 ± 2.2	54 ± 15	32.8 ± 2.3	30.7 ± 3.0	68 ± 18	< 5.6	45 ± 7	45 ± 16	35 ± 8	2.2 ± 1.1
KZ-09-090601-S	578 ± 48	6.1 ± 1.4	40.3 ± 4.5	49 ± 14	42.9 ± 2.3	41 ± 15	33.2 ± 2.3	31.8 ± 3.1	53 ± 18	6.2 ± 3.6	45 ± 7	35 ± 16	26 ± 8	2.9 ± 1.1
KZ-10-080601-S	556 ± 44	< 1.5	31.7 ± 3.9	30 ± 10	40.2 ± 2.1	56 ± 14	30.5 ± 2.1	26.5 ± 2.7	61 ± 16	< 5.4	43 ± 6	45 ± 15	23 ± 7	1.7 ± 1.0
KZ-11-070601-S	494 ± 44	8.6 ± 1.4	29.8 ± 4.0	74 ± 12	34.3 ± 2.1	39 ± 14	28.7 ± 2.1	28.5 ± 2.9	47 ± 17	< 5.4	39 ± 6	27 ± 15	29 ± 8	2.8 ± 1.1
KZ-12-060601-S	585 ± 46	3.0 ± 1.1	35.4 ± 4.2	47 ± 11	40.4 ± 2.2	36 ± 14	31.3 ± 2.2	30.8 ± 2.9	53 ± 17	< 5.2	48 ± 7	40 ± 16	23 ± 8	1.9 ± 1.0
KZ-13-050601-S	600 ± 49	4.7 ± 1.3	41.8 ± 4.6	45 ± 12	41.0 ± 2.3	48 ± 15	35.9 ± 2.4	37.5 ± 3.3	56 ± 18	< 5.9	52 ± 7	26 ± 16	17 ± 8	2.7 ± 1.1
KZ-14-040601-S	528 ± 42	3.6 ± 1.1	29.4 ± 3.7	28 ± 11	34.4 ± 2.0	37 ± 13	28.4 ± 2.0	25.4 ± 2.6	57 ± 15	< 5.1	36 ± 6	36 ± 14	21 ± 7	< 1.5
KZ-15-030601-S	563 ± 45	< 1.5	29.3 ± 3.9	34 ± 14	36.6 ± 2.1	47 ± 14	29.4 ± 2.1	27.9 ± 2.8	34 ± 15	< 5.3	38 ± 6	30 ± 15	25 ± 8	2.5 ± 1.0

B.3.6 Kazakhstan Bottom Sediments Metals Data, Spring 2001

Sample Code	Ca, %	Ti, %	Mn, %	Fe, %	Cu, g/t	Zn, g/t	As, g/t	Rb	Sr, g/t	Y, g/t	Zr, g/t	Nb, g/t	Mo, g/t	Ba, g/t	Pb, g/t
KZ-01-130601-B	6.0 ± 0.3	0.26 ± 0.07	0.05 ± 0.02	2.62 ± 0.03	< 41	62 ± 22	< 56	78 ± 5	244 ± 6	19 ± 4	176 ± 5	10.9 ± 2.3	< 2.4	605 ± 46	< 21
KZ-02-130601-B	4.9 ± 0.3	0.17 ± 0.07	0.04 ± 0.02	1.62 ± 0.03	< 38	< 29	< 53	70 ± 4	202 ± 5	8 ± 4	103 ± 4	7.4 ± 2.0	< 2.1	688 ± 46	< 19
KZ-03-150601-B	5.8 ± 0.3	0.26 ± 0.07	0.03 ± 0.02	2.01 ± 0.03	< 39	42 ± 20	< 53	77 ± 4	312 ± 6	16 ± 4	239 ± 5	10.4 ± 2.1	< 2.3	782 ± 48	< 19
KZ-04-150601-B	6.0 ± 0.3	0.32 ± 0.08	0.04 ± 0.02	1.91 ± 0.03	< 40	32 ± 21	< 54	72 ± 4	264 ± 6	19 ± 4	234 ± 5	11.4 ± 2.2	< 2.4	681 ± 47	< 20
KZ-05-150601-B	9.0 ± 0.4	0.15 ± 0.08	0.04 ± 0.02	2.42 ± 0.03	< 42	55 ± 22	< 58	63 ± 4	267 ± 6	16 ± 4	148 ± 5	9.8 ± 2.2	< 2.4	539 ± 44	< 21
KZ-06-180601-B	9.8 ± 0.4	0.17 ± 0.08	0.04 ± 0.02	2.08 ± 0.03	< 42	94 ± 23	< 59	59 ± 4	388 ± 7	16 ± 4	202 ± 5	8.7 ± 2.3	< 2.4	429 ± 41	< 21
KZ-07-110601-B	6.1 ± 0.3	0.19 ± 0.08	< 0.02	1.85 ± 0.03	< 39	35 ± 20	< 53	70 ± 4	196 ± 5	11 ± 4	162 ± 4	8.2 ± 2.0	< 2.2	606 ± 44	< 19
KZ-08-100601-B	7.1 ± 0.3	0.25 ± 0.08	< 0.03	2.04 ± 0.03	< 41	36 ± 21	< 56	69 ± 4	218 ± 6	15 ± 4	174 ± 5	9.8 ± 2.2	< 2.3	633 ± 46	< 20
KZ-09-090601-B	7.2 ± 0.3	0.24 ± 0.08	0.03 ± 0.02	2.06 ± 0.03	< 41	35 ± 21	< 55	71 ± 4	211 ± 6	14 ± 4	183 ± 5	9.3 ± 2.2	< 2.3	623 ± 45	< 20
KZ-10-080601-B	6.9 ± 0.3	0.24 ± 0.08	0.04 ± 0.02	2.08 ± 0.03	< 41	41 ± 21	< 55	70 ± 4	235 ± 6	17 ± 4	155 ± 5	10.9 ± 2.2	< 2.3	610 ± 45	< 20
KZ-11-070601-B	7.4 ± 0.4	0.22 ± 0.08	0.04 ± 0.02	2.68 ± 0.03	< 42	58 ± 22	< 57	76 ± 5	307 ± 7	16 ± 4	134 ± 5	10.6 ± 2.3	< 2.4	573 ± 46	< 20
KZ-12-060601-B	6.3 ± 0.3	0.15 ± 0.07	0.03 ± 0.02	1.69 ± 0.03	< 39	< 30	< 53	74 ± 4	206 ± 5	12 ± 4	101 ± 4	7.5 ± 2.0	< 2.1	655 ± 45	< 19
KZ-13-050601-B	5.5 ± 0.3	0.16 ± 0.07	< 0.02	1.50 ± 0.02	< 38	< 29	< 51	74 ± 4	185 ± 5	12 ± 4	137 ± 4	7.3 ± 1.9	< 2.1	653 ± 44	< 18
KZ-14-040601-B	7.2 ± 0.3	0.32 ± 0.08	0.04 ± 0.02	2.31 ± 0.03	< 40	42 ± 21	< 54	68 ± 4	272 ± 6	16 ± 4	188 ± 5	10.5 ± 2.2	< 2.1	522 ± 43	< 20
KZ-15-030601-B	6.0 ± 0.3	0.18 ± 0.08	0.03 ± 0.02	1.84 ± 0.03	< 40	36 ± 21	< 54	76 ± 4	219 ± 5	13 ± 4	110 ± 4	9.0 ± 2.1	< 2.2	642 ± 45	< 19
KZ-15-030601-B	6.0 ± 0.3	0.18 ± 0.08	0.03 ± 0.02	1.84 ± 0.03	< 40	36 ± 21	< 54	76 ± 4	219 ± 5	13 ± 4	110 ± 4	9.0 ± 2.1	< 2.2	642 ± 45	< 19

B.3.7 Kazakhstan Soils Metals Data, Spring 2001

Sample Code	Ca, %	Ti, %	Mn, %	Fe, %	Cu, g/t	Zn, g/t	As, g/t	Rb	Sr, g/t	Y, g/t	Zr, g/t	Nb, g/t	Mo, g/t	Ba, g/t	Pb, g/t
KZ-02-130601-S	6.9 ± 0.3	0.26 ± 0.08	0.04 ± 0.02	2.17 ± 0.03	< 41	45 ± 21	< 55	72 ± 4	217 ± 6	17 ± 4	195 ± 5	9.4 ± 2.2	< 2.3	640 ± 46	< 20
KZ-03-150601-S	4.7 ± 0.3	0.33 ± 0.07	0.03 ± 0.02	2.06 ± 0.03	< 39	40 ± 20	< 53	76 ± 4	246 ± 6	17 ± 4	275 ± 5	11.0 ± 2.2	2.5 ± 1.6	742 ± 48	< 19
KZ-04-150601-S	4.4 ± 0.3	0.29 ± 0.07	0.05 ± 0.02	2.45 ± 0.03	< 38	61 ± 20	< 51	77 ± 4	262 ± 6	18 ± 4	172 ± 5	11.9 ± 2.1	< 2.2	544 ± 42	< 18
KZ-05-150601-S	6.3 ± 0.3	0.23 ± 0.07	0.05 ± 0.02	2.72 ± 0.03	< 40	74 ± 21	< 54	77 ± 4	203 ± 5	18 ± 4	148 ± 5	10.6 ± 2.2	< 2.3	427 ± 40	24 ± 13
KZ-06-180601-S	8.2 ± 0.3	0.19 ± 0.08	0.03 ± 0.02	1.83 ± 0.03	< 41	125 ± 23	< 56	58 ± 4	257 ± 6	13 ± 4	190 ± 5	8.8 ± 2.2	< 2.4	512 ± 42	29 ± 14
KZ-07-110601-S	7.1 ± 0.3	0.22 ± 0.08	0.03 ± 0.02	2.08 ± 0.03	< 40	44 ± 21	< 55	69 ± 4	268 ± 6	15 ± 4	154 ± 5	10.1 ± 2.2	< 2.3	575 ± 44	< 19
KZ-08-100601-S	6.1 ± 0.3	0.23 ± 0.07	0.03 ± 0.02	2.38 ± 0.03	< 40	58 ± 21	< 55	68 ± 4	381 ± 7	14 ± 4	142 ± 5	9.3 ± 2.2	< 2.3	534 ± 43	< 20
KZ-09-090601-S	6.6 ± 0.3	0.23 ± 0.07	0.03 ± 0.02	2.62 ± 0.03	< 40	65 ± 22	< 55	74 ± 5	309 ± 7	17 ± 4	143 ± 5	11.7 ± 2.3	< 2.3	515 ± 43	< 20
KZ-10-080601-S	6.8 ± 0.3	0.22 ± 0.08	0.03 ± 0.02	2.10 ± 0.03	< 41	41 ± 21	< 56	71 ± 4	260 ± 6	17 ± 4	163 ± 5	9.3 ± 2.2	< 2.3	567 ± 44	< 20
KZ-11-070601-S	6.6 ± 0.3	0.23 ± 0.07	0.04 ± 0.02	2.15 ± 0.03	< 40	82 ± 21	< 54	61 ± 4	491 ± 8	13 ± 4	118 ± 5	8.6 ± 2.1	< 2.2	465 ± 40	< 20
KZ-12-060601-S	6.1 ± 0.3	0.19 ± 0.07	0.04 ± 0.02	2.38 ± 0.03	< 41	51 ± 21	< 55	75 ± 4	265 ± 6	17 ± 4	130 ± 4	10.2 ± 2.2	< 2.3	571 ± 44	< 20
KZ-13-050601-S	6.7 ± 0.3	0.25 ± 0.07	0.04 ± 0.02	2.83 ± 0.03	< 42	64 ± 22	< 57	76 ± 5	352 ± 7	19 ± 4	121 ± 5	10.2 ± 2.3	< 2.3	540 ± 44	< 20
KZ-14-040601-S	6.0 ± 0.3	0.20 ± 0.08	0.03 ± 0.02	1.96 ± 0.03	< 40	38 ± 20	< 53	68 ± 4	245 ± 6	15 ± 4	153 ± 5	9.8 ± 2.1	< 2.3	569 ± 43	< 19
KZ-15-030601-S	6.4 ± 0.3	0.23 ± 0.08	0.03 ± 0.02	2.09 ± 0.03	< 41	38 ± 21	< 54	71 ± 4	253 ± 6	13 ± 4	165 ± 5	9.8 ± 2.1	< 2.3	596 ± 44	< 20

B.3.8 Kyrgyzstan Radionuclides Data, Fall 2000

Sample Code	Beta activity (Bk/kg)	Alpha activity (Bk/kg)	K-40	Tl-208	Bi-212	Pb-212	Bi-214	Pb-214	Ra-226	Ac-228	Th-232	U-235	U-238
KG-01-021001-WD	0.0543	0.0401	0.4	<0.02	<0,3	<0,005	<0,04	<0,02	0.22	<0,08	<0,08	<0,001	<0,05
KG-01-021001-WS													
KG-01-021001-B													
KG-01-021001-V													
KG-01-021001-S	756.9	515	630	17	46	53	32	33	52	40	44	0.5	67
KG-02-021001-WD	0.0466	0.0069	0.7	<0,02	<0,3	<0,005	<0,04	<0,03	0.1	0.1	<0,08	<0,001	<0,01
KG-02-021001-WS													
KG-02-021001-B													
KG-02-021001-V													
KG-02-021001-S	567	412	450	16	26	38	24	26	46	35	30	0.4	57
KG-03-021001-WD	0.0469	0.0301	0.4	<0,02	<0,3	<0,005	<0,04	0.04	0.1	0.1	<0,08	<0,001	0.07
KG-03-021001-WS													
KG-03-021001-B													
KG-03-021001-V													
KG-03-021001-S	610.9	558	520	19	56	46	28	31	49	34	45	0.4	57
KG-04-031001-WD	0.0345	0.009	0.24	<0,02	<0,3	<0,01	<0,04	<0,05	0.06	0.1	<0,08	<0,001	<0,04
KG-04-031001-WS													
KG-04-031001-B													
KG-04-031001-V													

Provisional Data**Analysis performed by Kazakhstan Institute of Nuclear Physics**

Sample Code	Beta activity (Bk/kg)	Alpha activity (Bk/kg)	K-40	Tl-208	Bi-212	Pb-212	Bi-214	Pb-214	Ra-226	Ac-228	Th-232	U-235	U-238
KG-04-031001-S	372.8	442.1	300	12	37	27	22	25	29	24	31	0.35	50
KG-05-031001-WD	0.0404	0.0197	0.8	<0,02	<0,3	<0,03	<0,04	<0,05	0.09	0.16	<0,08	<0,001	<0,04
KG-05-031001-WS													
KG-05-031001-B													
KG-05-031001-V													
KG-05-031001-S	425	287.6	400	11	34	32	16	23	32	24	29	0.2	35
KG-06-061001-WD	0.0172	0.0045	0.5	<0,02	<0,3	<0,005	<0,04	<0,03	0.02	0.02	<0,08	<0,001	0.01
KG-06-061001-WS													
KG-06-061001-B													
KG-06-061001-V													
KG-06-061001-S	761.6	759.7	700	29	97	84	36	37	53	66	82	0.5	76
KG-07-061001-WD	0.0477	0.0424	0.33	<0,02	<0,3	0.01	<0,04	<0,03	0.12	0.1	<0,08	<0,001	0.05
KG-07-061001-WS													
KG-07-061001-B													
KG-07-061001-V													
KG-07-061001-S	630.3	214.6	510	21	36	39	22	26	43	30	33	0.54	77
KG-08-061001-WD	0.0394	0.0173	0.6	<0,02	<0,3	<0,01	<0,04	<0,03	0.09	0.1	<0,08	<0,001	0.02
KG-08-061001-WS													
KG-08-061001-B													
KG-08-061001-V													

Provisional Data

Analysis performed by Kazakhstan Institute of Nuclear Physics

Sample Code	Beta activity (Bk/kg)	Alpha activity (Bk/kg)	K-40	Tl-208	Bi-212	Pb-212	Bi-214	Pb-214	Ra-226	Ac-228	Th-232	U-235	U-238
KG-08-061001-S	733.1	429.2	570	26	63	54	30	38	68	44	54	0.6	92
KG-09-051001-WD	0.0362	0.0232	0.9	<0,02	<0,3	<0,01	<0,04	<0,03	0.1	<0,02	<0,08	<0,001	0.02
KG-09-051001-WS													
KG-09-051001-B													
KG-09-051001-V													
KG-09-051001-S	636.5	373.4	700	23	55	44	30	40	47	36	46	0.6	90
KG-10-051001-WD	0.0512	0.0373	0.4	<0,02	<0,3	<0,005	<0,04	<0,03	0.1	<0,02	<0,08	<0,001	<0,005
KG-10-051001-WS													
KG-10-051001-B													
KG-10-051001-V													
KG-10-051001-S	452.9	356.2	360	16	56	38	26	36	55	32	44	0.37	53
KG-11-051001-WD	0.0857	0.0303	0.7	<0,08	<0,3	<0,01	<0,04	<0,005	0.07	0.09	<0,08	<0,001	0.06
KG-11-051001-WS													
KG-11-051001-B													
KG-11-051001-V													
KG-11-051001-S	429.9	240.4	500	15	30	17	15	16	24	17	24	0.21	30
KG-12-051001-WD	0.0712	0.0578	0.4	<0,02	<0,3	<0,01	<0,04	<0,05	0.09	<0,08	<0,08	<0,001	0.05
KG-12-051001-WS													
KG-12-051001-B													
KG-12-051001-V													

Provisional Data**Analysis performed by Kazakhstan Institute of Nuclear Physics**

Sample Code	Beta activity (Bk/kg)	Alpha activity (Bk/kg)	K-40	Tl-208	Bi-212	Pb-212	Bi-214	Pb-214	Ra-226	Ac-228	Th-232	U-235	U-238
KG-12-051001-S	435.5	283.3	450	11	24	24	23	26	35	19	22	0.41	58
KG-13-051001-WD	0.049	0.0391	1	0.01	<0,3	<0,01	<0,04	0.04	0.2	0.16	<0,08	<0,001	<0,005
KG-13-051001-WS													
KG-13-051001-B													
KG-13-051001-V													
KG-13-051001-S	481.9	330.5	590	15	33	27	19	21	41	22	28	0.3	43
KG-14-051001-WD	0.0198	0.0094	0.5	<0,02	<0,3	<0,005	<0,04	<0,05	<0,01	<0,08	<0,08	<0,001	<0,005
KG-14-051001-WS													
KG-14-051001-B													
KG-14-051001-V													
KG-14-051001-S	427.8	214.6	430	12	39	26	21	22	54	26	33	0.46	66
KG-15-051001-WD	0.0105	<0,0028	0.3	<0,02	<0,3	0.02	<0,04	0.05	<0,01	<0,08	<0,08	<0,001	<0,005
KG-15-051001-WS													
KG-15-051001-B													
KG-15-051001-V													
KG-15-051001-S	637.3	201.7	490	16	34	30	19	23	33	24	29	0.28	40

B.3.9 Kyrgyzstan Water (Dissolved) Radionuclides Data, Spring 2001

Sample Code	K-40 mBq/l	Cs-137 mBq/l	Tl-208 mBq/l	Pb-210 mBq/l	Pb-212 mBq/l	Bi-212 mBq/l	Pb-214 mBq/l	Bi-214 mBq/l	Ra-224 mBq/l	Ra-226 mBq/l	Th-227 mBq/l	Ac-228 mBq/l	Th-234 mBq/l	U-235 mBq/l
KG-01-120501-WD	<368	<10	<23	<45	23±6	<109	<12	<16	<112	202±78	<31	<39	<40	<8
KG-02-120501-WD	<385	<10	<24	<45	<9	<110	<12	<16	<113	209±82	<31	<40	<42	10±5
KG-03-120501-WD	<388	<10	<23	<45	10±6	<113	<12	<17	<116	<131	<31	<41	<40	13±5
KG-04-110501-WD	<316	<8	<19	<32	11±5	<99	<10	<14	<94	143±64	<26	<32	<33	<7
KG-05-110501-WD	<386	<11	<25	<46	<9	<117	<13	<18	<117	181±82	<32	<42	<43	10±5
KG-06-050501-WD	<190	<5	<11	<23	10±3	<57	<6	<8	<58	146±40	<15	<20	<21	13±3
KG-07-050501-WD	<370	<9	<22	<44	16±6	<121	<12	<15	<113	139±78	<30	<40	<41	11±5
KG-08-050501-WD	<381	<10	<24	<46	21±6	<109	<12	<17	<115	266±83	<32	<38	60±27	<8
KG-09-070501-WD	<384	<10	<22	<47	24±6	<116	<13	<17	<115	198±82	<32	<42	<42	11±5
KG-10-070501-WD	<383	<11	<23	<45	<9	<116	<12	<16	<117	205±81	<31	<42	<42	<8
KG-11-070501-WD	<322	<9	<20	<40	10±5	<101	<11	<15	<97	208±70	<27	<33	51±23	<7
KG-12-070501-WD	<377	<10	<24	<45	10±6	<122	<12	<16	<115	183±78	<30	<40	<41	10±5
KG-13-070501-WD	<153	<4	<9	<18	17±2	<47	<5	13±4	<48	194±33	<12	<16	36±11	11±2
KG-14-070501-WD	<368	<10	<23	<44	11±6	<111	19±8	31±11	<115	131±78	<31	<40	<40	12±5
KG-15-070501-WD	<348	<9	<22	<42	18±6	<107	<11	<15	<110	125±73	<28	<39	<38	10±5

B.3.10 Kyrgyzstan Water (Suspended) Radionuclides Data, Spring 2001

Sample Code	K-40 mBq/l	Cs-137 mBq/l	Tl-208 mBq/l	Pb-210 mBq/l	Pb-212 mBq/l	Bi-212 mBq/l	Pb-214 mBq/l	Bi-214 mBq/l	Ra-224 mBq/l	Ra-226 mBq/l	Th-227 mBq/l	Ac-228 mBq/l	Th-234 mBq/l	U-235 mBq/l
KG-01-120501-WS	< 253	< 5.9	< 19	< 39	< 7.6	< 79	< 7.6	< 12	< 62	< 78	< 19	< 17	< 31	< 4.8
KG-02-120501-WS	< 186	< 4.3	< 13	< 29	< 5.4	< 60	< 5.6	< 9	< 49	< 58	< 14	< 13	< 23	< 3.3
KG-03-120501-WS	< 246	< 5.7	22 ± 12	< 37	< 7.3	< 75	< 7.8	< 12	< 63	86 ± 46	< 18	< 17	< 29	< 4.3
KG-04-110501-WS	427 ± 164	< 6.0	< 21	< 41	8.9 ± 4.9	< 83	< 8.5	19 ± 9	< 65	< 80	< 20	< 18	< 33	< 4.7
KG-05-110501-WS	392 ± 156	< 5.7	24 ± 12	< 40	12.2 ± 4.9	< 76	< 8.0	< 13	< 66	< 75	< 18	25 ± 11	< 32	< 4.5
KG-06-050501-WS	< 234	< 4.5	< 17	< 35	< 4.7	< 73	< 6.7	< 11	< 77	< 69	< 17	< 16	< 29	< 4.3
KG-07-050501-WS	271 ± 152	< 5.4	< 19	< 42	13.5 ± 4.8	< 84	< 8.1	< 12	< 64	< 76	< 18	26 ± 11	< 33	< 4.4
KG-08-050501-WS	< 238	< 5.8	< 17	< 34	< 6.6	< 76	< 7.2	< 11	< 59	< 70	< 17	< 16	< 28	< 4.2
KG-09-070501-WS	< 204	< 4.2	< 14	< 29	< 4.9	< 63	< 5.7	< 9	< 52	< 62	< 15	< 14	< 24	< 3.6
KG-10-070501-WS	< 247	< 5.5	< 17	< 36	< 6.8	< 74	< 7.0	< 11	< 61	< 75	< 17	< 17	< 30	< 4.5
KG-11-070501-WS	< 248	< 5.8	< 19	< 41	< 7.5	< 83	< 7.9	< 12	< 63	< 78	< 19	< 18	< 32	< 4.8
KG-12-070501-WS	289 ± 157	< 5.7	< 19	< 41	< 7.4	< 83	< 7.9	< 13	< 66	< 79	< 18	19 ± 11	< 32	< 4.7
KG-13-070501-WS	365 ± 145	< 5.5	< 18	< 35	< 6.6	< 78	< 7.0	< 12	< 57	< 69	< 15	< 16	< 29	< 4.2
KG-14-070501-WS	< 249	< 5.7	< 19	< 38	< 7.0	< 76	< 7.4	< 12	< 63	< 79	< 19	< 17	< 30	< 4.7
KG-15-070501-WS	253 ± 153	< 5.9	< 18	< 36	< 7.1	< 67	< 7.8	< 12	< 59	< 76	< 19	< 17	< 31	< 4.7

B.3.11 Kyrgyzstan Soil (-S) and Bottom Sediment (-B) Radionuclide Data, Spring 2001
 ^{40}K through ^{226}Ra

Sample Code	K-40 Bq/kg	Cs-137 Bq/kg	Tl-208 Bq/kg	Pb-210 Bq/kg	Pb-212 Bq/kg	Bi-212 Bq/kg	Pb-214 Bq/kg	Bi-214 Bq/kg	Ra-224 Bq/kg	Ra-226 Bq/kg
KG-01-120501-S	840 ± 27	< 0.5	54.3 ± 2.8	41 ± 7	58.4 ± 1.2	71 ± 9	32.1 ± 1.2	37.9 ± 1.8	57 ± 7	74 ± 8
KG-02-120501-S	661 ± 12	5.7 ± 0.3	33.1 ± 1.1	88.2 ± 4.1	37.6 ± 0.6	44.4 ± 3.5	24.5 ± 0.5	24.4 ± 0.7	42 ± 5	45.1 ± 3.2
KG-03-120501-S	737 ± 51	4.3 ± 1.2	82 ± 7	83 ± 15	85.4 ± 2.7	103 ± 19	69.8 ± 3.2	73.4 ± 4.5	< 129	131 ± 18
KG-04-110501-S	544 ± 24	2.4 ± 0.5	32.2 ± 2.5	29 ± 8	32.8 ± 1.0	41 ± 8	24.5 ± 1.1	24.7 ± 1.6	29 ± 6	42 ± 7
KG-05-110501-S	698 ± 60	10.2 ± 1.9	43 ± 6	39 ± 17	40.4 ± 2.4	42 ± 17	29.4 ± 2.7	32.3 ± 4.0	< 83	52 ± 16
KG-06-050501-S	1128 ± 29	2.7 ± 0.5	62.1 ± 3.0	43 ± 8	63.9 ± 1.2	74 ± 9	28.8 ± 1.1	27.7 ± 1.6	52 ± 6	49 ± 7
KG-07-050501-S	580 ± 43	< 1.0	36.6 ± 4.5	43 ± 14	42.4 ± 2.4	65 ± 15	32.3 ± 2.2	30.9 ± 3.0	< 175	40 ± 13
KG-08-050501-S	774 ± 44	13.1 ± 1.5	52.8 ± 4.7	110 ± 15	53.9 ± 2.4	67 ± 14	38.4 ± 2.1	35.9 ± 3.0	54 ± 13	65 ± 12
KG-09-070501-S	949 ± 28	< 0.6	45.4 ± 2.6	76 ± 8	51.3 ± 1.1	51 ± 7	37.3 ± 1.2	35.4 ± 1.7	47 ± 7	69 ± 7
KG-10-070501-S	580 ± 49	< 1.0	28.6 ± 4.5	37 ± 14	34.6 ± 2.0	25 ± 11	24.8 ± 2.1	27.1 ± 3.2	32 ± 11	53 ± 14
KG-11-070501-S	538 ± 37	1.5 ± 0.6	16.3 ± 2.8	23 ± 10	17.5 ± 1.1	21 ± 8	16.2 ± 1.3	17.0 ± 2.0	20 ± 7	35 ± 9
KG-12-070501-S	519 ± 24	3.1 ± 0.5	20.6 ± 2.0	42 ± 7	24.0 ± 0.9	26 ± 6	19.7 ± 1.0	20.5 ± 1.4	26 ± 6	52 ± 7
KG-13-070501-S	714 ± 46	< 1.0	27.3 ± 4.0	34 ± 12	28.7 ± 1.6	44 ± 13	19.0 ± 1.6	18.4 ± 2.5	39 ± 10	43 ± 12
KG-14-070501-S	459 ± 36	6.3 ± 1.1	19.8 ± 3.2	44 ± 11	24.1 ± 1.4	27 ± 10	21.4 ± 1.7	20.5 ± 2.3	< 104	47 ± 11
KG-15-070501-S	610 ± 26	4.8 ± 0.7	26.4 ± 2.3	81 ± 8	30.0 ± 1.2	38 ± 7	21.2 ± 1.0	20.3 ± 1.5	32 ± 7	47 ± 7
KG-15-070501-B	384 ± 21	2.6 ± 0.5	16.6 ± 1.8	21 ± 6	18.1 ± 0.7	23 ± 6	12.6 ± 0.8	12.6 ± 1.2	< 1.9	22 ± 6

Kyrgyzstan Soil (-S) and Bottom Sediment (-B) Radionuclide Data, Spring 2001, continued

^{227}Th through ^{235}U

Sample Code	Th-227 Bq/kg	Ac-228 Bq/kg	Th-234 Bq/kg	U-235 Bq/kg
KG-01-120501-S	3.7 ± 1.4	62.4 ± 2.4	36 ± 5	1.2 ± 0.4
KG-02-120501-S	1.6 ± 0.6	38.7 ± 1.0	21.5 ± 2.2	1.0 ± 0.2
KG-03-120501-S	< 5.2	85 ± 5	58 ± 11	1.6 ± 1.0
KG-04-110501-S	< 2.2	36.8 ± 2.1	18 ± 5	1.2 ± 0.4
KG-05-110501-S	< 5.6	42 ± 5	20 ± 11	< 1.6
KG-06-050501-S	< 2.5	67.7 ± 2.5	28 ± 5	1.0 ± 0.4
KG-07-050501-S	< 4.3	42.5 ± 3.9	31 ± 10	1.7 ± 0.8
KG-08-050501-S	6.1 ± 2.7	56.9 ± 3.9	29 ± 8	1.4 ± 0.7
KG-09-070501-S	3.6 ± 1.3	50.3 ± 2.2	34.4 ± 4.8	1.6 ± 0.4
KG-10-070501-S	< 4.3	35.3 ± 4.0	17 ± 8	< 1.3
KG-11-070501-S	< 2.9	17.8 ± 2.4	17 ± 6	< 0.9
KG-12-070501-S	< 2.0	23.1 ± 1.7	16.1 ± 4.4	< 0.6
KG-13-070501-S	< 3.4	29.9 ± 3.2	18 ± 8	1.3 ± 0.7
KG-14-070501-S	6.1 ± 2.4	25.5 ± 2.8	22 ± 7	< 1.0
KG-15-070501-S	< 2.2	31.4 ± 2.0	16.0 ± 4.3	0.8 ± 0.4
KG-15-070501-B	< 1.9	17.7 ± 1.5	10.2 ± 3.9	1.1 ± 0.4

B.3.12 Kyrgyzstan Metals Data, Fall 2000
Ag through K

Sample Code	Ag	Au	Ba	Br	Ca	Co	Cr	Cu	Cs	Fe	Hg	K
KG-01-021001-WD	<0,01	0.017	34	3.3	13776	0.044	1.3	84	<0,001	82	0.028	nd
KG-01-021001-WS												
KG-01-021001-B												
KG-01-021001-V												
KG-01-021001-S	<0,1	0.046	540	<1	56650	13	14	nd	6	29810	<0,01	24034
KG-02-021001-WD	<0,01	0.024	24	4.8	9561	0.3	1.5	197	0.026	<10	0.019	nd
KG-02-021001-WS												
KG-02-021001-B												
KG-02-021001-V												
KG-02-021001-S	<0,1	<0,01	533	<1	89760	14	37	nd	3	37233	<0,01	30952
KG-03-021001-WD	<0,01	0.017	34	4.9	11044	0.21	0.84	206	<0,001	30	<0,01	nd
KG-03-021001-WS												
KG-03-021001-B												
KG-03-021001-V												
KG-03-021001-S	<0,1	0.12	300	<1	76100	11	39	nd	4.8	30460	<0,01	36000
KG-04-031001-WD	<0,01	0.0067	38	4.8	8585	<0,01	1.7	504	0.011	27	<0,01	nd
KG-04-031001-WS												
KG-04-031001-B												
KG-04-031001-V												
KG-04-031001-S	4.7	0.054	440	<1	80180	14	98	nd	7.2	37600	<0,01	19480

Provisional Data**Analysis performed by Kazakhstan Institute of Nuclear Physics**

Sample Code	Ag	Au	Ba	Br	Ca	Co	Cr	Cu	Cs	Fe	Hg	K
KG-05-031001-WD	0.033	0.021	28	5.5	7220	0.073	0.85	471	<0,001	16	0.01	nd
KG-05-031001-WS												
KG-05-031001-B												
KG-05-031001-V												
KG-05-031001-S	<0,1	<0,001	393	<1	83190	14	30	nd	6	24715	<0,01	26872
KG-06-061001-WD	0.014	0.011	20	2.7	4533	0.021	1.4	87	0.0064	26	<0,01	nd
KG-06-061001-WS												
KG-06-061001-B												
KG-06-061001-V												
KG-06-061001-S	<0,1	<0,001	376	<1	28888	9	<1	nd	6.2	26995	<0,01	17136
KG-07-061001-WD	<0,01	0.0046	35	7.4	11243	0.076	6.1	534	0.03	119	<0,01	nd
KG-07-061001-WS												
KG-07-061001-B												
KG-07-061001-V												
KG-07-061001-S	<0,1	<0,001	330	<1	70972	7.1	13	nd	4.7	17960	<0,01	<10000
KG-08-061001-WD	<0,01	0.012	33	7.6	8782	0.054	1.1	480	<0,001	34	<0,01	nd
KG-08-061001-WS												
KG-08-061001-B												
KG-08-061001-V												
KG-08-061001-S	<0,1	0.034	300	<1	61355	15	34	nd	9	29230	<0,01	33958
KG-09-051001-WD	<0,01	0.0061	35	7.8	11402	<0,01	0.31	400	0.017	19	<0,01	nd
KG-09-051001-WS												

Provisional Data**Analysis performed by Kazakhstan Institute of Nuclear Physics**

Sample Code	Ag	Au	Ba	Br	Ca	Co	Cr	Cu	Cs	Fe	Hg	K
KG-09-051001-B												
KG-09-051001-V												
KG-09-051001-S	<0,1	0.044	280	<1	64260	18	21	nd	9.6	32450	<0,01	19310
KG-10-051001-WD	<0,01	0.012	50	9.2	11323	0.056	1	616	<0,001	34	<0,01	nd
KG-10-051001-WS												
KG-10-051001-B												
KG-10-051001-V												
KG-10-051001-S	<0,1	<0,001	353	<1	44336	7.9	19	nd	6.3	21490	<0,01	21521
KG-11-051001-WD	<0,01	0.021	91	9.4	8013	0.073	1.1	976	<0,001	35	0.054	nd
KG-11-051001-WS												
KG-11-051001-B												
KG-11-051001-V												
KG-11-051001-S	<0,1	0.044	625	<1	63420	14	148	nd	3.3	21040	<0,01	17250
KG-12-051001-WD	<0,01	0.0045	70	7.5	6779	0.047	2.1	603	<0,001	36	<0,01	nd
KG-12-051001-WS												
KG-12-051001-B												
KG-12-051001-V												
KG-12-051001-S	<0,1	0.075	580	<1	83848	12	78	nd	3.9	25427	<0,01	<10000
KG-13-051001-WD	<0,01	0.0027	43	4.9	5534	<0,01	1.9	585	<0,001	37	0.018	nd
KG-13-051001-WS												
KG-13-051001-B												
KG-13-051001-V												

Provisional Data**Analysis performed by Kazakhstan Institute of Nuclear Physics**

Sample Code	Ag	Au	Ba	Br	Ca	Co	Cr	Cu	Cs	Fe	Hg	K
KG-13-051001-S	<0,1	0.061	344	<1	58380	6.9	16	nd	3.4	16710	<0,01	27083
KG-14-051001-WD	<0,01	0.0039	26	3.9	6622	0.022	2.9	424	0.01	41	<0,01	nd
KG-14-051001-WS												
KG-14-051001-B												
KG-14-051001-V												
KG-14-051001-S	3.7	<0,001	<50	<1	42880	16	75	nd	5.3	26390	<0,01	<10000
KG-15-051001-WD	<0,01	0.0058	29	1.2	9212	<0,01	1.3	67	0.011	32	<0,01	nd
KG-15-051001-WS												
KG-15-051001-B												
KG-15-051001-V												
KG-15-051001-S	<0,1	0.039	220	<1	76792	8.6	14	nd	7.9	21550	<0,01	<10000

Kyrgyzstan Metals Data, Fall 2000, continued
La thorough U

Sample Code	La	Mg	Mn	Na	Ni	Rb	Sb	Sc	Se	Th	Zn	U
KG-01-021001-WD	0.13	nd	<10	4170	<30	<0,1	0.37	0.0042	0.5	<0,1	1.4	1.3
KG-01-021001-WS												
KG-01-021001-B												
KG-01-021001-V												
KG-01-021001-S	67	nd	490	11994	<40	66	<0,1	9.8	<0,1	7.5	nd	<1
KG-02-021001-WD	0.13	nd	<10	6452	<30	<0,1	0.8	0.0027	0.53	<0,1	0.45	0.58
KG-02-021001-WS												
KG-02-021001-B												
KG-02-021001-V												
KG-02-021001-S	60	nd	1100	11830	<40	48	0.85	9.9	<0,1	7	nd	<1
KG-03-021001-WD	<0,01	nd	<10	5900	<30	<0,1	0.46	0.0029	0.63	<0,1	1.8	0.81
KG-03-021001-WS												
KG-03-021001-B												
KG-03-021001-V												
KG-03-021001-S	55	nd	523	12700	<40	29	<0,1	8.7	<0,1	9	nd	2.6
KG-04-031001-WD	0.086	nd	<10	10347	<30	<0,1	0.37	0.003	0.54	<0,1	1.2	0.27
KG-04-031001-WS												
KG-04-031001-B												
KG-04-031001-V												
KG-04-031001-S	30	nd	570	13011	<40	<10	<0,1	10	<0,1	6.7	nd	<1

Provisional Data

Analysis performed by Kazakhstan Institute of Nuclear Physics

Sample Code	Ag	Au	Ba	Br	Ca	Co	Cr	Cu	Cs	Fe	Hg	K
KG-05-031001-WD	<0,01	nd	<10	9798	<30	<0,2	0,51	0,0035	0,42	<0,1	1,3	0,42
KG-05-031001-WS												
KG-05-031001-B												
KG-05-031001-V												
KG-05-031001-S	37	nd	672	12985	<40	28	<0,1	10	<0,1	4,1	nd	2,5
KG-06-061001-WD	0,047	nd	<10	1619	<30	0,41	0,18	0,0026	0,11	<0,1	1,6	0,57
KG-06-061001-WS												
KG-06-061001-B												
KG-06-061001-V												
KG-06-061001-S	55	nd	524	17620	<40	124	0,24	8,4	<0,1	8,1	nd	2,1
KG-07-061001-WD	<0,01	nd	<10	12550	<30	<0,1	0,26	0,0067	0,43	<0,1	0,56	0,72
KG-07-061001-WS												
KG-07-061001-B												
KG-07-061001-V												
KG-07-061001-S	52	nd	403	13040	<40	25	<0,1	6,7	<0,1	5,2	nd	<1
KG-08-061001-WD	0,11	nd	<10	11021	<30	0,49	0,31	0,004	0,51	<0,1	1,3	0,96
KG-08-061001-WS												
KG-08-061001-B												
KG-08-061001-V												
KG-08-061001-S	45	nd	695	10564	<40	78	<0,1	11	<0,1	6,6	nd	3,4
KG-09-051001-WD	<0,01	nd	<10	10059	<30	<0,1	0,16	0,003	0,52	<0,1	<0,1	0,68
KG-09-051001-WS												

Provisional Data**Analysis performed by Kazakhstan Institute of Nuclear Physics**

Sample Code	Ag	Au	Ba	Br	Ca	Co	Cr	Cu	Cs	Fe	Hg	K
KG-09-051001-B												
KG-09-051001-V												
KG-09-051001-S	34	nd	728	9573	<40	75	0.19	13.6	<0,1	7.7	nd	2.6
KG-10-051001-WD	<0,01	nd	<10	15666	<30	<0,1	0.43	0.0048	0.56	<0,1	1.8	0.65
KG-10-051001-WS												
KG-10-051001-B												
KG-10-051001-V												
KG-10-051001-S	40	nd	525	6538	<40	<10	1.5	10	<0,1	5.6	nd	<1
KG-11-051001-WD	0.37	nd	<10	19240	<30	<0,1	0.28	0.0085	1.7	<0,1	1.2	2.1
KG-11-051001-WS												
KG-11-051001-B												
KG-11-051001-V												
KG-11-051001-S	19	nd	527	8529	<40	68	0.86	8.6	<0,1	3.4	nd	<1
KG-12-051001-WD	0.23	nd	<10	14475	<30	<0,1	0.32	0.0077	1.8	<0,1	4.9	1.2
KG-12-051001-WS												
KG-12-051001-B												
KG-12-051001-V												
KG-12-051001-S	29	nd	745	7458	<40	41	0.47	11	<0,1	4.1	nd	4
KG-13-051001-WD	0.085	nd	<10	11400	<30	<0,1	0.36	0.0058	1.5	<0,1	1	1.3
KG-13-051001-WS												
KG-13-051001-B												
KG-13-051001-V												

Provisional Data**Analysis performed by Kazakhstan Institute of Nuclear Physics**

Sample Code	Ag	Au	Ba	Br	Ca	Co	Cr	Cu	Cs	Fe	Hg	K
KG-13-051001-S	26	nd	300	5697	<40	38	0.77	5.6	<0,1	4.6	nd	<1
KG-14-051001-WD	<0,01	nd	<10	8838	<30	0.67	0.13	0.0061	0.47	<0,1	0.26	0.23
KG-14-051001-WS												
KG-14-051001-B												
KG-14-051001-V												
KG-14-051001-S	27	nd	787	10960	<40	40	<0,1	13	<0,1	2.4	nd	<1
KG-15-051001-WD	<0,01	nd	<10	1200	<30	<0,1	0.13	0.0066	0.17	<0,1	0.66	0.11
KG-15-051001-WS												
KG-15-051001-B												
KG-15-051001-V												
KG-15-051001-S	27	nd	880	1790	<40	34	<0,1	8.1	<0,1	4.5	nd	<1

B.3.13 Kyrgyzstan Soils Metals Data, Spring 2001
Ca through Rb

Sample Code	Ca, %	Ti, %	Mn, %	Fe, %	Cu g/t	Zn, g/t	As g/t	Rb, g/t
KG-01-120501-S	6.7 ± 0.3	0.38 ± 0.06	0.03 ± 0.01	3.33 ± 0.03	< 37	42 ± 19	< 50	108 ± 5
KG-02-120501-S	9.6 ± 0.3	0.39 ± 0.07	0.06 ± 0.02	3.01 ± 0.03	< 40	48 ± 21	< 54	74 ± 4
KG-03-120501-S	12.0 ± 0.4	0.50 ± 0.07	0.04 ± 0.02	3.96 ± 0.03	< 40	59 ± 21	< 53	78 ± 4
KG-04-110501-S	7.6 ± 0.1	0.37 ± 0.02	0.04 ± 0.00	3.34 ± 0.01	< 12	65 ± 6	< 16	67 ± 1
KG-05-110501-S	8.4 ± 0.3	0.37 ± 0.07	0.05 ± 0.02	3.36 ± 0.03	< 40	68 ± 21	< 54	79 ± 4
KG-06-050501-S	4.3 ± 0.3	0.34 ± 0.06	0.04 ± 0.01	3.32 ± 0.03	< 38	83 ± 20	< 51	121 ± 5
KG-07-050501-S	9.9 ± 0.3	0.35 ± 0.07	0.04 ± 0.02	2.50 ± 0.03	< 39	55 ± 20	< 52	68 ± 4
KG-08-050501-S	4.0 ± 0.3	0.39 ± 0.06	0.09 ± 0.02	3.82 ± 0.03	< 40	83 ± 21	< 52	114 ± 5
KG-09-070501-S	6.6 ± 0.4	0.42 ± 0.07	0.04 ± 0.02	4.55 ± 0.04	< 50	95 ± 26	< 65	121 ± 6
KG-10-070501-S	9.0 ± 0.4	0.33 ± 0.08	0.05 ± 0.02	2.84 ± 0.03	< 43	86 ± 23	< 58	73 ± 5
KG-11-070501-S	8.7 ± 0.4	0.44 ± 0.06	0.06 ± 0.02	4.07 ± 0.04	< 47	< 36	< 61	61 ± 5
KG-12-070501-S	6.7 ± 0.1	0.38 ± 0.02	0.04 ± 0.01	4.46 ± 0.01	< 14	41 ± 7	< 19	58 ± 1
KG-13-070501-S	7.1 ± 0.1	0.28 ± 0.02	0.03 ± 0.00	2.20 ± 0.01	< 11	56 ± 6	< 15	92 ± 1
KG-14-070501-S	5.3 ± 0.3	0.36 ± 0.06	0.05 ± 0.01	3.21 ± 0.03	< 38	67 ± 20	< 50	66 ± 4
KG-15-070501-S	5.5 ± 0.3	0.33 ± 0.06	0.06 ± 0.01	2.87 ± 0.03	< 36	75 ± 19	< 47	69 ± 4
KG-15-070501-B	5.5 ± 0.3	0.35 ± 0.04	0.04 ± 0.01	5.06 ± 0.03	< 47	37 ± 24	< 59	45 ± 4

Kyrgyzstan Soils Metals Data, Spring 2001, continued
Sr through Pb

Sample Code	Sr, g/t	Y, g/t	Zr, g/t	Nb, g/t	Mo, g/t	Ba, g/t	Pb, g/t
KG-01-120501-S	298 ± 6	25 ± 4	220 ± 5	13.5 ± 2.1	< 2.2	694 ± 43	< 18
KG-02-120501-S	252 ± 6	19 ± 4	153 ± 4	11.7 ± 2.1	< 2.2	672 ± 44	< 19
KG-03-120501-S	246 ± 6	36 ± 4	562 ± 7	16.1 ± 2.4	4.3 ± 1.8	843 ± 49	< 19
KG-04-110501-S	238 ± 2	17 ± 1	129 ± 1	10.6 ± 0.6	1.3 ± 0.4	546 ± 12	18 ± 4
KG-05-110501-S	281 ± 6	22 ± 4	181 ± 5	11.4 ± 2.2	< 2.3	524 ± 40	< 19
KG-06-050501-S	171 ± 5	43 ± 4	252 ± 5	19.0 ± 2.3	< 2.3	689 ± 44	< 19
KG-07-050501-S	243 ± 5	19 ± 4	237 ± 5	11.0 ± 2.1	< 2.3	675 ± 44	< 19
KG-08-050501-S	288 ± 6	27 ± 4	220 ± 5	16.9 ± 2.3	2.8 ± 1.5	662 ± 44	< 19
KG-09-070501-S	233 ± 6	24 ± 5	163 ± 5	12.3 ± 2.5	< 2.6	588 ± 48	110 ± 18
KG-10-070501-S	178 ± 5	16 ± 4	159 ± 5	9.1 ± 2.2	< 2.4	580 ± 45	< 21
KG-11-070501-S	134 ± 5	15 ± 4	102 ± 4	8.3 ± 2.3	< 2.4	635 ± 49	< 22
KG-12-070501-S	169 ± 2	20 ± 1	157 ± 1	9.1 ± 0.7	1.8 ± 0.5	609 ± 15	8 ± 4
KG-13-070501-S	137 ± 1	14 ± 1	156 ± 1	7.8 ± 0.6	1.3 ± 0.4	686 ± 13	19 ± 4
KG-14-070501-S	150 ± 4	16 ± 3	124 ± 4	8.5 ± 1.9	< 2.0	447 ± 36	19 ± 12
KG-15-070501-S	121 ± 4	16 ± 3	125 ± 4	9.3 ± 1.9	< 2.0	675 ± 42	< 18
KG-15-070501-B	152 ± 5	20 ± 4	104 ± 4	10.2 ± 2.2	< 2.3	524 ± 43	< 21

B.3.14 Tajikistan Water (Dissolved) Radionuclides Data, Fall 2000

Sample code	K-40 mBq/l	Cs-137 mBq/l	Tl-208 mBq/l	Pb-210 mBq/l	Pb-212 mBq/l	Bi-212 mBq/l	Pb-214 mBq/l	Bi-214 mBq/l	Ra-224 mBq/l	Ra-226 mBq/l	Th-227 mBq/l	Ac-228 mBq/l	Th-234 mBq/l	U-235 mBq/l
TJ-01-061100-WD	<386	<9	<19	<44	9.4±5.5	<101	<11	<15	<89	<7.8	<29	<40	<41	7.8±4.7
TJ-02-071100-WD	<472	<12	<25	<64	16±7	<120	<15	<19	<117	<11	<39	<47	68±36	17±7
TJ-03-071100-WD	<473	<12	<26	<66	17±7	<126	<13	<17	<114	<11	<37	<49	59±35	14±7
TJ-04-101100-WD	<776	<19	<36	<103	<18	<198	<22	<26	<186	<16	<59	<76	<92	<16
TJ-05-111100-WD	<466	<12	<25	<65	16±7	<126	<14	<18	<119	<11	<37	<48	<57	13±7
TJ-06-071100-WD	<464	<11	<24	<56	<10	<130	17±9	31±12	<133	<10	<34	<49	<51	10±6
TJ-07-101100-WD	<485	<12	<27	<59	33±8	<124	<15	31±13	<140	<10	<36	<50	<53	16±6
TJ-08-101100-WD	<484	<12	<24	<65	19±7	<131	<15	<19	<148	<11	<38	<50	70±36	<11
TJ-09-141100-WD	<440	<11	<23	<52	20±7	<113	23±9	38±12	<128	<8.8	<34	<37	<47	<9
TJ-10-141100-WD	<236	<6	<13	<32	24±4	<64	14±5	16±6	<73	<5.0	<20	<23	41±18	13±3
TJ-13-241100-WD	<475	<13	<25	<64	<11	<127	<15	<19	<143	<11	<40	<47	102±37	15±7
TJ-14-231100-WD	<396	<10	27±14	<47	37±7	<98	24±8	42±11	<119	<8.6	<30	<37	104±28	10±5
TJ-15-251100-WD	<484	<12	<26	<65	<12	<133	<15	<19	<147	15±7	<39	<50	212±40	24±7
TJ-TB-231100-WD	<472	<12	<27	<62	<12	<131	<15	<19	<143	<10	<40	<49	<55	12±6

B.3.15 Tajikistan Water (Dissolved) Radionuclides Data, Spring 2001

Sample Code	K-40 mBq/l	Cs-137 mBq/l	Tl-208 mBq/l	Pb-210 mBq/l	Pb-212 mBq/l	Bi-212 mBq/l	Pb-214 mBq/l	Bi-214 mBq/l	Ra-224 mBq/l	Ra-226 mBq/l	Th-227 mBq/l	Ac-228 mBq/l	Th-234 mBq/l	U-235 mBq/l
TJ-01-290601-WD	< 590	< 16	< 35	< 82	28 ± 10	< 200	22 ± 12	34 ± 18	< 190	< 210	< 50	< 64	< 72	16 ± 8
TJ-02-100701-WD	< 580	< 14	< 35	< 80	< 14	< 190	< 20	38 ± 18	< 180	270 ± 130	< 50	< 64	< 66	< 12
TJ-03-030701-WD	< 410	< 10	< 25	< 54	14 ± 6	< 130	< 12	< 18	< 130	180 ± 90	< 35	< 42	< 48	< 8
TJ-04-170701-WD	< 440	< 12	< 30	< 58	< 12	< 130	< 14	< 18	< 140	270 ± 100	< 35	< 50	< 52	12 ± 6
TJ-05-200701-WD	< 570	< 16	< 35	< 82	< 14	< 180	< 18	< 24	< 170	280 ± 130	< 50	< 64	< 70	< 12
TJ-06-110701-WD	< 410	< 12	< 25	< 56	< 10	< 120	< 12	< 18	< 130	220 ± 90	< 35	< 44	68 ± 30	14 ± 6
TJ-07-220701-WD	< 590	< 16	< 35	< 76	< 14	< 180	< 20	< 26	< 170	240 ± 130	< 50	< 60	< 68	14 ± 8
TJ-08-210701-WD	< 420	< 10	< 25	< 56	16 ± 6	< 120	< 14	< 16	< 130	280 ± 90	< 35	< 46	54 ± 30	14 ± 6
TJ-09-270701-WD	< 600	< 16	< 40	< 80	< 14	< 190	< 20	< 26	< 180	< 220	< 50	< 62	< 70	18 ± 8
TJ-10-250701-WD	< 590	< 16	< 35	< 82	16 ± 10	< 150	< 20	< 26	< 170	290 ± 130	< 50	< 66	< 70	< 14
TJ-11-260701-WD	< 410	< 12	< 25	< 56	< 10	< 130	< 14	22 ± 12	< 140	180 ± 90	< 35	< 46	74 ± 30	14 ± 6
TJ-12-260701-WD	< 570	< 16	< 35	< 78	< 14	< 180	< 18	< 24	< 180	< 200	< 50	< 66	< 66	14 ± 8
TJ-13-060801-WD	< 210	< 6	< 12	< 26	14 ± 4	< 60	< 6	< 8	< 65	270 ± 50	< 15	< 22	84 ± 16	14 ± 2
TJ-14-040801-WD	< 410	< 10	< 25	< 56	16 ± 6	< 120	< 14	< 18	< 130	330 ± 90	< 35	< 46	70 ± 30	14 ± 6
TJ-15-070801-WD	< 610	< 16	< 40	< 78	18 ± 10	< 180	< 20	< 26	< 180	360 ± 130	< 50	< 62	< 72	< 14

B.3.16 Tajikistan Bottom Sediments Radionuclides Data, Spring 2001
 ^{40}K through ^{226}Ra

Sample Code	K-40 Bq/kg	Cs-137 Bq/kg	Tl-208 Bq/kg	Pb-210 Bq/kg	Po-212 Bq/kg	Bi-212 Bq/kg	Pb-214 Bq/kg	Bi-214 Bq/kg	Ra-224 Bq/kg	Ra-226 Bq/kg
TJ-01-290601-B	2287 ± 78	9.0 ± 1.3	211 ± 8	151 ± 14	241.1 ± 3.5	231 ± 26	154.1 ± 3.4	133 ± 5	240 ± 17	114 ± 16
TJ-02-100701-B	2404 ± 91	13.0 ± 1.6	141 ± 8	180 ± 15	160.7 ± 3.3	177 ± 25	115.9 ± 3.4	106 ± 6	152 ± 16	79 ± 16
TJ-02-100701-B	2400 ± 142	15.9 ± 2.6	132 ± 12	170 ± 24	162 ± 5	192 ± 41	109 ± 5	103 ± 8	147 ± 25	98 ± 25
TJ-03-030701-B	2116 ± 141	6.3 ± 2.1	102 ± 11	87 ± 20	107.2 ± 4.5	127 ± 38	76.1 ± 4.7	67 ± 7	110 ± 23	80 ± 24
TJ-04-170701-B	1990 ± 139	7.5 ± 2.2	107 ± 12	93 ± 20	116.5 ± 4.7	137 ± 39	79.2 ± 4.8	68 ± 8	112 ± 23	62 ± 24
TJ-05-200701-B	2049 ± 134	< 2.6	72 ± 9	54 ± 17	78.5 ± 3.7	53 ± 27	61.0 ± 4.0	51 ± 6	77 ± 20	48 ± 21
TJ-06-110701-B	1482 ± 122	4.1 ± 1.7	56 ± 9	44 ± 16	61.0 ± 3.5	95 ± 32	53.9 ± 4.0	52 ± 7	67 ± 20	< 33
TJ-07-220701-B	1392 ± 110	< 2.6	96 ± 10	89 ± 17	97.0 ± 3.9	133 ± 35	90.3 ± 4.6	84 ± 7	96 ± 21	74 ± 22
TJ-09-270701-B	1552 ± 88	< 1.8	62 ± 6	51 ± 11	67.2 ± 2.6	84 ± 22	57.5 ± 2.9	49 ± 5	59 ± 14	36 ± 15
TJ-11-260701-B	1109 ± 94	< 2.2	48 ± 7	51 ± 14	56.1 ± 2.9	66 ± 25	55.7 ± 3.5	51 ± 6	50 ± 16	< 27
TJ-12-260701-B	971 ± 98	2.6 ± 1.5	55 ± 8	54 ± 15	61.8 ± 3.4	76 ± 29	62.0 ± 4.0	53 ± 6	59 ± 18	36 ± 20
TJ-13-060801-B	1329 ± 112	< 2.3	55 ± 8	50 ± 15	57.0 ± 3.3	73 ± 29	53.6 ± 3.9	50 ± 6	63 ± 18	41 ± 20
TJ-14-040801-B	1293 ± 67	2.6 ± 1.0	82 ± 6	93 ± 12	88.9 ± 2.4	96 ± 19	89.8 ± 2.9	78 ± 5	96 ± 13	63 ± 14
TJ-15-070801-B	1463 ± 112	3.9 ± 1.7	108 ± 11	109 ± 20	122.4 ± 4.4	133 ± 35	129 ± 5	106 ± 8	110 ± 23	95 ± 25

Tajikistan Bottom Sediments Radionuclides Data, Spring 2001, continued

^{227}Th through ^{235}U

Sample Code	Th-227 Bq/kg	Ac-228, Bq/kg	Th-234 Bq/kg	U-235 Bq/kg
TJ-01-290601-B	8.4 ± 3.9	241 ± 13	123 ± 8	7.5 ± 1.0
TJ-02-100701-B	< 6.6	159 ± 12	90 ± 7	6.6 ± 1.0
TJ-02-100701-B	13 ± 6	158 ± 19	91 ± 12	4.5 ± 1.5
TJ-03-030701-B	< 10	109 ± 17	51 ± 10	2.8 ± 1.4
TJ-04-170701-B	< 10	107 ± 17	52 ± 10	3.9 ± 1.4
TJ-05-200701-B	< 9	71 ± 14	45 ± 9	3.3 ± 1.3
TJ-06-110701-B	< 9	68 ± 14	44 ± 10	4.6 ± 1.3
TJ-07-220701-B	< 9	97 ± 15	78 ± 9	5.0 ± 1.3
TJ-09-270701-B	< 6.0	72 ± 10	49 ± 6	3.6 ± 0.9
TJ-11-260701-B	< 7.2	59 ± 11	37 ± 7	3.3 ± 1.1
TJ-12-260701-B	< 9	60 ± 12	54 ± 8	3.3 ± 1.2
TJ-13-060801-B	< 7.8	62 ± 13	52 ± 8	3.1 ± 1.2
TJ-14-040801-B	< 5.3	91 ± 9	67 ± 5	5.3 ± 0.8
TJ-15-070801-B	< 10	120 ± 16	93 ± 10	6.3 ± 1.5

B.3.17 Tajikistan Soil Radionuclides Data, spring 2001

Sample Code	K-40 Bq/kg	Cs-137 Bq/kg	Tl-208 Bq/kg	Pb-210 Bq/kg	Pb-212 Bq/kg	Bi-212 Bq/kg	Pb-214 Bq/kg	Bi-214 Bq/kg	Ra-224 Bq/kg	Ra-226 Bq/kg	Th-227 Bq/kg	Ac-228 Bq/kg	Th-234 Bq/kg	U-235 Bq/kg
TJ-01-290601-S	719 ± 39	26.8 ± 1.8	42.6 ± 4.0	120 ± 13	39.8 ± 2.3	43 ± 12	34.6 ± 1.8	38.4 ± 2.8	40 ± 16	61 ± 14	< 4.1	44.1 ± 3.3	28 ± 7	2.1 ± 0.8
TJ-02-100701-S	828 ± 42	20.3 ± 1.7	76 ± 5	133 ± 14	80.6 ± 3.3	104 ± 16	53.2 ± 2.3	55.3 ± 3.4	67 ± 22	98 ± 17	< 4.8	88.5 ± 4.5	52 ± 9	3.1 ± 1.0
TJ-03-030701-S	947 ± 43	3.0 ± 0.9	89 ± 5	74 ± 12	89.7 ± 3.4	111 ± 16	65.3 ± 2.4	69.3 ± 3.6	91 ± 21	90 ± 17	< 5.0	101.3 ± 4.6	49 ± 9	4.1 ± 1.0
TJ-04-170701-S	953 ± 39	10.0 ± 1.1	89.9 ± 4.9	102 ± 12	99.3 ± 3.1	118 ± 15	46.5 ± 1.9	49.0 ± 2.8	105 ± 32	60 ± 14	< 4.3	94.1 ± 4.0	37 ± 8	3.6 ± 0.9
TJ-05-200701-S	735 ± 33	3.6 ± 0.8	49.0 ± 3.6	37 ± 9	44.8 ± 2.2	64 ± 11	34.3 ± 1.6	35.8 ± 2.3	38 ± 11	48 ± 12	< 3.4	52.7 ± 3.0	40 ± 7	2.1 ± 0.7
TJ-06-110701-S	620 ± 34	< 1.0	29.5 ± 3.3	34 ± 10	30.4 ± 2.0	46 ± 11	22.4 ± 1.5	25.0 ± 2.2	29 ± 14	31 ± 11	< 3.8	32.2 ± 2.7	23 ± 7	2.3 ± 0.7
TJ-07-220701-S	557 ± 34	< 1.2	37.8 ± 3.7	36 ± 10	35.9 ± 2.2	41 ± 11	33.8 ± 1.7	33.4 ± 2.6	43 ± 14	41 ± 13	< 4.1	43.8 ± 3.2	31 ± 7	2.8 ± 0.8
TJ-09-270701-S	605 ± 35	1.4 ± 0.7	34.2 ± 3.5	73 ± 11	30.1 ± 2.0	46 ± 11	29.5 ± 1.6	31.9 ± 2.5	46 ± 12	34 ± 12	< 3.8	38.9 ± 3.0	19 ± 7	2.9 ± 0.8
TJ-10-250701-S	427 ± 25	4.9 ± 0.7	30.9 ± 2.8	50 ± 8	34.2 ± 1.4	44 ± 9	25.6 ± 1.3	25.9 ± 1.9	35 ± 9	42 ± 10	< 3.1	33.7 ± 2.3	25 ± 5	1.9 ± 0.6
TJ-11-260701-S	511 ± 30	1.1 ± 0.6	38.8 ± 3.4	47 ± 10	42.2 ± 1.7	48 ± 10	31.5 ± 1.5	31.5 ± 2.3	35 ± 10	47 ± 12	< 3.6	45.1 ± 2.9	28 ± 7	1.9 ± 0.7
TJ-12-260701-S	433 ± 31	1.5 ± 0.7	29.2 ± 3.3	30 ± 9	33.5 ± 1.7	34 ± 10	27.4 ± 1.6	26.9 ± 2.3	38 ± 11	28 ± 12	< 3.6	34.8 ± 2.9	30 ± 7	3.4 ± 0.8
TJ-13-060801-S	544 ± 37	4.3 ± 1.0	27.8 ± 3.6	30 ± 10	30.9 ± 1.7	39 ± 11	25.2 ± 1.6	26.6 ± 2.5	37 ± 12	30 ± 12	< 4.1	30.8 ± 3.0	19 ± 7	2.6 ± 0.8
TJ-14-040801-S	580 ± 29	2.7 ± 0.7	37.0 ± 3.1	49 ± 9	41.9 ± 1.5	54 ± 10	33.2 ± 1.4	34.1 ± 2.1	48 ± 10	38 ± 11	< 3.2	43.8 ± 2.6	41 ± 6	3.7 ± 0.7
TJ-15-070801-S	624 ± 35	12.1 ± 1.3	48.0 ± 4.0	72 ± 11	48.4 ± 1.9	59 ± 12	48.5 ± 1.9	47.9 ± 2.9	32 ± 9	56 ± 14	< 4.2	51.3 ± 3.3	39 ± 7	3.4 ± 0.8

B.3.18 Tajikistan Vegetation Radionuclides Data, Fall 2000

Sample code	K-40 Bq/kg	Cs-137 Bq/kg	Tl-208 Bq/kg	Pb-210 Bq/kg	Pb-212 Bq/kg	Bi-212 Bq/kg	Pb-214 Bq/kg	Bi-214 Bq/kg	Ra-224 Bq/kg	Ra-226 Bq/kg	Th-227 Bq/kg	Ac-228 Bq/kg	Th-234 Bq/kg	U-235 Bq/kg
TJ-03-071100-V	100 ± 35	< 1.2	< 3.2	18 ± 4	3.4 ± 0.8	< 14	3.6 ± 1.0	< 2.1	< 15	< 15	< 1.1	< 5.3	< 5	1.4 ± 0.6
TJ-04-101100-V	1620 ± 116	< 3.0	< 7.7	21 ± 8	8.7 ± 2.0	< 38	9.0 ± 2.5	< 5.3	< 36	< 37	< 2.4	< 13	< 12	3.0 ± 1.5
TJ-05-101100-V	373 ± 54	< 1.8	< 4.2	10 ± 5	3.4 ± 1.0	< 18	5.0 ± 1.4	4.8 ± 1.9	< 18	< 21	< 6.0	< 7.6	< 6	< 1.3
TJ-13-241100-V	342 ± 153	< 5.8	< 14	22 ± 13	16.8 ± 3.6	< 63	14.8 ± 4.4	< 9.5	< 64	101 ± 42	< 1.8	< 24	< 20	< 4.3
TJ-14-231100-V	< 235	< 5.0	< 13	27 ± 13	15.5 ± 3.5	< 62	11.2 ± 4.1	< 9.2	< 57	99 ± 42	< 2.8	< 23	37 ± 13	< 4.1

B.3.19 Tajikistan Vegetation Radionuclides Data, Spring 2001
 ^{40}K through ^{226}Ra

Sample Code	K-40 Bq/kg	Cs-137 Bq/kg	Tl-208 Bq/kg	Pb-210 Bq/kg	Pb-212 Bq/kg	Bi-212 Bq/kg	Pb-214 Bq/kg	Bi-214 Bq/kg	Ra-224 Bq/kg	Ra-226 Bq/kg
TJ-04-170701-V	1863 ± 90	3.7 ± 1.5	13.7 ± 3.7	23.5 ± 6.9	15.0 ± 1.7	< 27	20.9 ± 2.1	21.1 ± 3.1	< 26	< 27
TJ-06-110701-V	920 ± 43	< 1.2	13.3 ± 2.2	14.5 ± 4.0	15.1 ± 1.0	17 ± 9	15.3 ± 1.2	13.9 ± 1.7	17 ± 9	31 ± 10
TJ-07-220701-V	504 ± 26	< 0.6	< 1.4	< 3.2	1.0 ± 0.4	< 7	1.5 ± 0.5	1.4 ± 0.7	< 7	< 8
TJ-13-060801-V	976 ± 48	< 1.2	6.9 ± 2.0	13.2 ± 4.0	8.4 ± 0.9	< 14	6.6 ± 1.1	5.9 ± 1.4	< 14	19 ± 10
TJ-14-211101-V	688 ± 28	< 0.6	2.4 ± 1.0	7.8 ± 2.6	3.7 ± 0.5	< 8	3.8 ± 0.6	4.1 ± 0.8	< 8	< 10

^{227}Th through ^{235}U

Sample Code	Th-227 Bq/kg	Ac-228 Bq/kg	Th-234 Bq/kg	U-235 Bq/kg
TJ-04-170701-V	< 6.7	32.3 ± 7.2	21.2 ± 6.0	2.4 ± 1.1
TJ-06-110701-V	< 3.4	30.6 ± 4.2	21.8 ± 3.7	< 1.0
TJ-07-220701-V	< 1.9	2.7 ± 1.6	< 2.7	< 0.5
TJ-13-060801-V	< 3.5	11.4 ± 3.5	23.8 ± 3.9	1.2 ± 0.6
TJ-14-211101-V	< 2.1	6.0 ± 1.9	62.3 ± 3.5	2.9 ± 0.5

B.3.20 Tajikistan Bottom Sediments Metals Data, Spring 2001

Sample Code	Ca, %	Ti, %	Mn, %	Fe, %	Cu g/t	Zn, g/t	As g/t	Rb g/t	Sr, g/t	Y, g/t	Zr, g/t	Nb, g/t	Mo, g/t	Ba, g/t	Pb g/t
TJ-01-290601-B	3.3 ± 0.2	0.30 ± 0.04	0.03 ± 0.01	2.45 ± 0.02	< 25	55 ± 13	< 34	132 ± 3	219 ± 4	17 ± 3	233 ± 3	9.1 ± 1.4	< 1.5	728 ± 31	< 13
TJ-02-100701-B	3.5 ± 0.2	0.25 ± 0.04	0.03 ± 0.01	2.33 ± 0.02	< 23	137 ± 13	< 31	153 ± 3	190 ± 3	15 ± 2	123 ± 2	9.6 ± 1.2	< 1.3	643 ± 27	30 ± 8
TJ-03-030701-B	3.8 ± 0.1	0.31 ± 0.03	0.02 ± 0.01	2.49 ± 0.01	< 19	48 ± 10	< 26	120 ± 3	247 ± 3	8 ± 2	87 ± 2	8.4 ± 1.0	< 1.1	745 ± 24	< 10
TJ-04-170701-B	5.1 ± 0.2	0.25 ± 0.05	0.03 ± 0.01	2.01 ± 0.02	< 24	40 ± 13	< 34	111 ± 3	204 ± 3	13 ± 2	86 ± 2	7.7 ± 1.3	< 1.4	637 ± 29	< 12
TJ-05-200701-B	3.9 ± 0.2	0.19 ± 0.04	0.02 ± 0.01	1.54 ± 0.01	< 22	28 ± 11	< 30	114 ± 3	211 ± 3	7 ± 2	51 ± 2	4.9 ± 1.1	< 1.2	636 ± 27	< 11
TJ-06-110701-B	5.9 ± 0.2	0.29 ± 0.04	0.03 ± 0.01	1.65 ± 0.01	< 22	29 ± 11	< 30	72 ± 2	266 ± 3	12 ± 2	189 ± 3	5.6 ± 1.2	< 1.3	582 ± 25	< 11
TJ-07-220701-B	8.0 ± 0.2	0.35 ± 0.04	0.04 ± 0.01	2.70 ± 0.02	< 23	44 ± 12	< 31	70 ± 3	291 ± 4	22 ± 2	259 ± 3	10.3 ± 1.3	1.5 ± 0.9	414 ± 22	< 11
TJ-09-270701-B	9.0 ± 0.2	0.23 ± 0.05	0.04 ± 0.01	2.54 ± 0.02	< 26	33 ± 13	< 35	77 ± 3	147 ± 3	16 ± 2	101 ± 2	7.8 ± 1.3	< 1.4	368 ± 23	< 12
TJ-11-260701-B	7.2 ± 0.2	0.32 ± 0.04	0.03 ± 0.01	1.90 ± 0.01	< 20	30 ± 10	< 28	56 ± 2	195 ± 3	12 ± 2	127 ± 2	7.7 ± 1.1	< 1.1	384 ± 19	< 10
TJ-12-260701-B	8.4 ± 0.2	0.38 ± 0.05	0.04 ± 0.01	2.88 ± 0.02	< 27	41 ± 14	< 37	52 ± 3	236 ± 4	15 ± 2	158 ± 3	7.8 ± 1.4	< 1.5	343 ± 24	< 13
TJ-13-060801-B	9.0 ± 0.2	0.26 ± 0.05	0.03 ± 0.01	2.13 ± 0.02	< 26	35 ± 13	< 35	70 ± 3	206 ± 3	12 ± 2	94 ± 3	8.8 ± 1.4	< 1.4	758 ± 32	< 13
TJ-14-040801-B	8.9 ± 0.2	0.30 ± 0.04	0.04 ± 0.01	2.12 ± 0.02	< 22	62 ± 12	< 30	76 ± 2	240 ± 3	14 ± 2	178 ± 3	9.3 ± 1.2	1.6 ± 0.8	786 ± 27	18 ± 7
TJ-15-070801-B	8.4 ± 0.2	0.30 ± 0.05	0.04 ± 0.01	2.27 ± 0.02	< 24	50 ± 12	< 32	84 ± 3	257 ± 3	13 ± 2	91 ± 2	9.6 ± 1.3	1.9 ± 0.9	1103 ± 34	< 12

B.3.21 Tajikistan Soils Metals Data, Spring 2001

Sample Code	Ca, %	Ti, %	Mn, %	Fe, %	Cu g/t	Zn, g/t g/t	As, g/t	Rb g/t	Sr, g/t	Y, g/t	Zr, g/t	Nb, g/t	Mo, g/t	Ba, g/t	Pb g/t
TJ-01-290601-S	7.2 ± 0.2	0.42 ± 0.04	0.03 ± 0.01	2.74 ± 0.02	< 20	78 ± 11	< 27	90 ± 2	151 ± 2	19 ± 2	137 ± 2	11.1 ± 1.1	2.1 ± 0.8	276 ± 17	< 10
TJ-02-100701-S	2.6 ± 0.2	0.29 ± 0.03	0.04 ± 0.01	3.34 ± 0.02	< 23	154 ± 13	< 30	108 ± 3	139 ± 3	24 ± 2	135 ± 2	13.3 ± 1.3	< 1.3	453 ± 23	45 ± 8
TJ-03-030701-S	3.9 ± 0.2	0.28 ± 0.04	0.03 ± 0.01	2.53 ± 0.02	< 24	83 ± 13	< 32	104 ± 3	203 ± 3	18 ± 2	273 ± 3	9.7 ± 1.3	1.5 ± 1.0	651 ± 28	< 12
TJ-04-170701-S	2.9 ± 0.2	0.26 ± 0.04	0.03 ± 0.01	2.25 ± 0.02	< 23	91 ± 13	< 31	94 ± 3	179 ± 3	15 ± 2	174 ± 3	7.8 ± 1.2	< 1.4	535 ± 25	< 12
TJ-05-200701-S	4.0 ± 0.2	0.24 ± 0.04	0.03 ± 0.01	1.99 ± 0.02	< 24	45 ± 12	< 32	84 ± 3	232 ± 4	14 ± 2	168 ± 3	7.7 ± 1.3	< 1.4	513 ± 26	< 12
TJ-06-110701-S	3.7 ± 0.2	0.22 ± 0.04	0.03 ± 0.01	1.47 ± 0.01	< 22	22 ± 11	< 30	65 ± 2	157 ± 3	11 ± 2	214 ± 3	6.2 ± 1.2	1.4 ± 0.9	456 ± 23	< 11
TJ-07-220701-S	8.2 ± 0.2	0.30 ± 0.04	0.04 ± 0.01	2.49 ± 0.02	< 21	42 ± 11	< 28	64 ± 2	434 ± 4	17 ± 2	195 ± 3	8.6 ± 1.1	1.6 ± 0.8	415 ± 20	< 10
TJ-09-270701-S	8.4 ± 0.2	0.31 ± 0.04	0.04 ± 0.01	2.95 ± 0.02	< 25	47 ± 13	< 33	69 ± 3	271 ± 4	20 ± 2	178 ± 3	8.1 ± 1.3	1.7 ± 0.9	369 ± 23	< 12
TJ-10-250701-S	8.7 ± 0.2	0.83 ± 0.05	0.04 ± 0.01	2.80 ± 0.02	< 24	104 ± 13	< 32	51 ± 2	285 ± 4	17 ± 2	157 ± 3	8.4 ± 1.2	3.0 ± 0.9	334 ± 21	< 11
TJ-11-260701-S	7.3 ± 0.2	0.86 ± 0.05	0.04 ± 0.01	2.47 ± 0.02	< 22	69 ± 12	< 30	68 ± 2	222 ± 3	20 ± 2	237 ± 3	12.1 ± 1.3	1.8 ± 0.9	400 ± 21	< 11
TJ-12-260701-S	9.1 ± 0.2	0.32 ± 0.05	0.04 ± 0.01	2.78 ± 0.02	< 27	39 ± 14	< 36	52 ± 3	275 ± 4	19 ± 3	152 ± 3	9.1 ± 1.4	1.7 ± 1.0	336 ± 24	< 13
TJ-13-060801-S	7.5 ± 0.2	0.87 ± 0.06	0.03 ± 0.01	2.11 ± 0.02	< 28	63 ± 15	< 40	62 ± 3	291 ± 4	13 ± 3	122 ± 3	8.8 ± 1.5	2.4 ± 1.1	503 ± 29	< 14
TJ-14-040801-S	6.1 ± 0.2	0.24 ± 0.05	0.04 ± 0.01	2.19 ± 0.02	< 25	84 ± 14	< 35	69 ± 3	252 ± 4	16 ± 2	162 ± 3	9.1 ± 1.4	2.0 ± 1.0	548 ± 28	< 13
TJ-15-070801-S	8.3 ± 0.2	0.48 ± 0.04	0.04 ± 0.01	2.99 ± 0.02	< 25	100 ± 13	< 33	90 ± 3	316 ± 4	18 ± 2	148 ± 3	12.2 ± 1.4	2.2 ± 0.9	918 ± 32	< 12

B.3.22 Uzbekistan Water (Dissolved) Radionuclide Data, Fall 2000

Sample code	K-40 mBq/l	Cs-137 mBq/l	Ra-226 mBq/l	Tl-208 mBq/l	Pb-210 mBq/l	Pb-212 mBq/l	Bi-212 mBq/l	Pb-214 mBq/l	Bi-214 mBq/l	Ra-224 mBq/l	Th-227 mBq/l	Ac-228 mBq/l	Th-234 mBq/l	U-235 mBq/l
UZ-01-091100WD	343 ± 45	9.6 ± 2.0	80 ± 21	< 2.1	< 8	1.9 ± 1.0	< 31	21 ± 12	23 ± 4	< 18	< 3.6	13 ± 5	66 ± 7	< 1.8
UZ-02-091100WD	379 ± 108	< 6.9	< 79	< 5.4	< 18	< 4.3	< 88	36 ± 5	41 ± 11	< 132	< 9.1	33 ± 15	79 ± 16	< 4.5
UZ-03-091100WD	229 ± 36	< 2.0	100 ± 19	2.7 ± 1.2	< 7	3.1 ± 0.9	< 22	28 ± 2	34 ± 4	< 46	< 3.3	13 ± 5	83 ± 6	< 1.7
UZ-04-021100WD	154 ± 84	13 ± 5	77 ± 46	< 4.8	< 17	4.1 ± 2.2	< 60	15 ± 4	18 ± 8	< 103	8.4 ± 5.1	< 20	64 ± 14	< 4.2
UZ-05-171100WD	420 ± 40	38 ± 3	125 ± 20	2.5 ± 1.2	< 8	1.7 ± 0.9	< 27	21 ± 2	24 ± 3	< 44	< 3.3	< 7	132 ± 7	2.8 ± 1.1
UZ-06-241000WD	459 ± 129	< 7.4	172 ± 67	< 6.7	< 26	5.6 ± 3.0	< 107	27 ± 5	51 ± 13	< 147	< 10.3	< 25	208 ± 24	< 6.0
UZ-07-191000WD	123 ± 67	< 4.7	92 ± 38	< 3.9	< 15	7.7 ± 2.2	< 58	27 ± 4	35 ± 8	< 86	< 6.5	23 ± 11	77 ± 12	< 3.4
UZ-08-191000WD	112 ± 64	< 4.2	< 60	< 4.2	< 14	3.4 ± 1.8	< 60	18 ± 3	24 ± 7	< 91	< 6.1	< 13	73 ± 12	< 3.3
UZ-09-171000WD	109 ± 52	9.8 ± 2.9	90 ± 31	< 3.0	< 10	3.7 ± 1.6	< 44	22 ± 3	31 ± 6	< 79	< 5.2	15 ± 8	70 ± 10	< 2.7
UZ-10-111000WD	62 ± 36	3.8 ± 1.8	< 30	< 1.9	< 9	< 1.7	< 33	16 ± 2	20 ± 5	< 55	< 4.0	< 9	16 ± 5	< 1.7
UZ-11-101000WD	< 99	< 4.3	< 47	< 4.0	< 14	< 2.7	< 45	21 ± 3	30 ± 7	< 88	< 5.8	< 15	17 ± 8	< 2.9
UZ-12-101000WD	< 103	108 ± 9	< 47	4.5 ± 2.7	< 15	4.3 ± 1.8	< 44	23 ± 3	28 ± 8	< 88	< 6.2	< 17	34 ± 10	< 2.7

B.3.23 Uzbekistan Water (Dissolved) Radionuclide Data, Spring 2001

Sample Code	K-40 mBq/l	Cs-137 mBq/l	Tl-208 mBq/l	Pb-210 mBq/l	Pb-212 mBq/l	Bi-212 mBq/l	Pb-214 mBq/l	Bi-214 mBq/l	Ra-224 mBq/l	Ra-226 Bq/l	Th-227 mBq/l	Ac-228 mBq/l	Th-234 mBq/l	U-235 mBq/l
UZ-01-180501-WD	284 ± 142	42 ± 6	< 20	< 64	30 ± 4	< 78	< 8	< 12	< 60	< 92	< 18	24 ± 12	134 ± 34	8 ± 4
UZ-02-180501-WD	< 274	< 6	< 24	< 72	30 ± 6	< 104	< 10	< 14	< 70	< 110	< 24	< 22	116 ± 40	< 6
UZ-03-180501-WD	304 ± 88	76 ± 4	< 12	50 ± 24	28 ± 2	< 50	< 6	< 8	42 ± 22	< 56	< 12	22 ± 6	128 ± 20	8 ± 2
UZ-04-310501-WD	< 314	30 ± 6	< 26	< 80	32 ± 6	< 122	< 12	< 18	< 76	< 124	< 24	< 22	158 ± 44	7 ± 4
UZ-05-290501-WD	< 216	< 6	< 20	< 62	30 ± 4	< 80	< 8	< 12	< 58	< 90	< 18	< 16	112 ± 32	< 6
UZ-06-050601-WD	220 ± 118	32 ± 4	< 16	< 52	28 ± 4	< 66	< 6	< 12	< 50	< 72	< 16	18 ± 10	96 ± 26	8 ± 4
UZ-07-310501-WD	< 488	< 10	< 26	< 48	20 ± 6	< 114	< 12	< 16	< 92	200 ± 86	< 32	< 42	190 ± 30	17 ± 6
UZ-08-310501-WD	< 440	< 10	< 22	< 42	18 ± 6	< 110	< 12	< 14	< 88	158 ± 76	< 28	< 38	46 ± 24	8 ± 4
UZ-09-290501-WD	< 532	< 12	< 28	< 52	16 ± 6	< 130	< 14	< 18	< 106	< 146	< 36	< 48	64 ± 30	13 ± 6
UZ-10-150501-WD	< 476	20 ± 8	< 24	< 46	10 ± 6	< 114	< 12	< 18	< 92	150 ± 80	< 32	< 42	112 ± 28	11 ± 6
UZ-11-110501-WD	< 554	< 12	< 28	< 54	14 ± 6	< 138	< 14	< 20	< 116	< 152	< 36	< 50	< 48	9 ± 6
UZ-12-290501-WD	< 220	6 ± 2	< 12	< 22	16 ± 2	< 54	30 ± 4	42 ± 6	< 44	136 ± 38	< 14	< 20	28 ± 12	10 ± 2
UZ-13-190501-WD	< 632	< 14	< 30	< 60	18 ± 8	< 154	< 16	< 22	< 120	< 172	< 40	< 52	< 56	11 ± 6
UZ-14-170501-WD	< 364	94 ± 8	< 18	< 32	10 ± 4	< 84	< 10	< 12	< 72	108 ± 60	< 22	< 32	44 ± 20	7 ± 4
UZ-15-190501-WD	442 ± 210	54 ± 10	< 28	< 106	26 ± 6	< 118	< 12	< 18	< 84	< 144	< 26	< 26	354 ± 60	19 ± 6

B.3.24 Uzbekistan Water (Suspended) Radionuclides Data, Fall 2000
 ^{40}K through ^{226}Ra

Sample code	K-40 mBq/l	Cs-137 mBq/l	Tl-208 mBq/l	Pb-210 mBq/l	Pb-212 mBq/l	Bi-212 mBq/l	Pb-214 mBq/l	Bi-214 mBq/l	Ra-224 mBq/l	Ra-226 mBq/l
UZ-01-091100-WS	138 ± 73	8.0 ± 2.2	10.0 ± 5.7	< 18	< 3.5	< 38	< 3.6	< 6.2	< 28	< 34
UZ-02-091100-WS	< 260	22 ± 4	< 16	< 24	16 ± 4	< 76	< 8	< 10	< 76	108 ± 50
UZ-03-091100-WS	< 338	< 8	< 22	< 32	22 ± 6	< 92	< 10	< 14	< 94	< 104
UZ-04-021100-WS	< 227	25 ± 5	< 16	< 36	< 6.8	< 69	< 6.8	< 11	< 60	< 69
UZ-05-171000-WS	< 124	7.6 ± 2.2	< 9.6	< 21	< 3.6	< 39	< 3.9	< 6.8	< 33	< 39
UZ-06-241000-WS	< 124	7.6 ± 2.2	< 9.6	< 21	< 3.6	< 39	< 3.9	< 6.8	< 33	< 39
UZ-07-191100-WS	1090 ± 268	28 ± 6	150 ± 26	248 ± 60	196 ± 12	138 ± 80	136 ± 12	118 ± 16	194 ± 60	184 ± 80
UZ-08-191100-WS	1204 ± 204	30 ± 6	168 ± 22	248 ± 46	208 ± 10	180 ± 64	136 ± 8	116 ± 12	154 ± 46	262 ± 64
UZ-09-171000-WS	< 223	8.0 ± 3.6	< 16	< 32	< 5.8	< 70	< 6.6	< 11	< 56	< 66
UZ-10-111000-WS	< 88	< 2.1	< 6.4	< 12	< 2.4	< 27	< 2.9	8.3 ± 3.0	< 22	< 26
UZ-11-101000-WS	< 88	< 2.1	< 6.4	< 12	< 2.4	< 27	< 2.9	8.3 ± 3.0	< 22	< 26
UZ-12-101000-WS	< 88	< 2.1	< 6.4	< 12	< 2.4	< 27	< 2.9	8.3 ± 3.0	< 22	< 26

Uzbekistan Water (Suspended) Radionuclides Data, Fall 2000, continued

^{227}Th through ^{235}U

Sample code	Th-227 mBq/l	Ac-228 mBq/l	Th-234 mBq/l	U-235, mBq/l
UZ-01-091100-WS	< 8.5	< 8.3	< 14	< 2.1
UZ-02-091100-WS	< 20	< 28	< 24	8 ± 4
UZ-03-091100-WS	< 24	< 36	< 32	8 ± 4
UZ-04-021100-WS	< 17	< 16	< 29	< 4.0
UZ-05-171000-WS	< 9.6	< 8.8	< 16	< 2.4
UZ-06-241000-WS	< 9.6	< 8.8	< 16	< 2.4
UZ-07-191100-WS	< 26	192 ± 22	168 ± 46	10 ± 6
UZ-08-191100-WS	< 20	246 ± 18	118 ± 32	8 ± 4
UZ-09-171000-WS	< 16	< 15	< 27	< 4.2
UZ-10-111000-WS	< 6.4	< 5.6	< 10	< 1.7
UZ-11-101000-WS	< 6.4	< 5.6	< 10	< 1.7
UZ-12-101000-WS	< 6.4	< 5.6	< 10	< 1.7

B.3.25 Uzbekistan Water (Suspended) Radionuclides Data, Spring 2001
 ^{40}K through ^{226}Ra

Sample code	K-40 mBq/l	Co-57 mBq/l	Cs-134 mBq/l	Cs-137 mBq/l	Tl-208 mBq/l	Pb-210 mBq/l	Pb-212 mBq/l	Bi-212 mBq/l	Pb-214 mBq/l	Bi-214 mBq/l	Ra-224 mBq/l	Ra-226 mBq/l
UZ-01-180501-WS	< 227	2.8 ± 1.0	< 3.4	< 5.8	< 17	< 33	< 5.8	< 72	< 6.6	< 11	< 54	< 69
UZ-02-180501-WS	< 234	6.8 ± 1.2	< 4.0	15 ± 4	< 16	< 34	< 5.2	< 74	< 7.2	< 11	< 54	< 73
UZ-03-180501-WS	< 320			< 8	< 20	< 30	12 ± 4	< 88	12 ± 6	20 ± 10	< 90	< 106
UZ-04-310501-WS	< 237	4.2 ± 1.2	< 3.6	14 ± 4	< 17	< 35	< 6.4	< 73	< 7.2	< 11	< 57	< 72
UZ-05-290501-WS	< 253	4.6 ± 1.2	< 4.2	8.8 ± 4.0	< 19	< 34	< 7.0	< 74	< 7.0	< 11	< 63	< 76
UZ-06-050601-WS	< 253	4.6 ± 1.2	< 4.2	8.8 ± 4.0	< 19	< 34	< 7.0	< 74	< 7.0	< 11	< 63	< 76
UZ-07-310501-WS	< 269	< 1.8	< 4.0	< 5.0	< 20	< 37	< 7.4	< 82	< 7.8	< 12	< 66	< 79
UZ-08-310501-WS	< 269	< 1.8	< 4.0	< 5.0	< 20	< 37	< 7.4	< 82	< 7.8	< 12	< 66	< 79
UZ-09-290501-WS	< 269	< 1.8	< 4.0	< 5.0	< 20	< 37	< 7.4	< 82	< 7.8	< 12	< 66	< 79
UZ-10-110501-WS	< 181	2.6 ± 0.8	< 2.8	4.4 ± 2.6	21 ± 9	< 25	< 4.8	< 54	< 5.2	< 8.4	< 44	< 54
UZ-11-110501-WS	< 181	2.6 ± 0.8	< 2.8	4.4 ± 2.6	21 ± 9	< 25	< 4.8	< 54	< 5.2	< 8.4	< 44	< 54
UZ-12-110501-WS	< 181	2.6 ± 0.8	< 2.8	4.4 ± 2.6	21 ± 9	< 25	< 4.8	< 54	< 5.2	< 8.4	< 44	< 54
UZ-13-190501-WS	920 ± 284			30 ± 8	34 ± 18	68 ± 38	86 ± 8	118 ± 72	42 ± 8	38 ± 12	90 ± 52	< 104
UZ-13-190501-WS	699 ± 233	5.0 ± 1.8	< 6.0	31 ± 7	58 ± 20	81 ± 40	49 ± 8	< 126	38 ± 8	27 ± 13	< 104	207 ± 76
UZ-14-170501-WS	< 236	6.0 ± 1.2	9.2 ± 2.8	62 ± 6	< 18	< 35	< 6.8	< 77	< 7.4	< 13	< 57	< 71
UZ-15-190501-WS	< 236	9.2 ± 1.4	< 3.6	< 5.8	< 17	< 34	< 6.6	< 72	< 6.8	< 11	< 58	< 73

Uzbekistan Water (Suspended) Radionuclides Data, Spring 2001, continued

^{227}Th through ^{235}U

Sample code	Th-227 mBq/l	Ac-228 mBq/l	Th-234 mBq/l	U-235 mBq/l
UZ-01-180501-WS	< 16	< 16	< 27	< 4.0
UZ-02-180501-WS	< 17	< 16	< 29	< 4.4
UZ-03-180501-WS	< 26	< 36	< 28	8 ± 4
UZ-04-310501-WS	< 17	< 17	< 28	< 4.2
UZ-05-290501-WS	< 19	< 17	< 29	< 4.4
UZ-06-050601-WS	< 19	< 17	< 29	< 4.4
UZ-07-310501-WS	< 19	< 17	< 31	< 5.0
UZ-08-310501-WS	< 19	< 17	< 31	< 5.0
UZ-09-290501-WS	< 19	< 17	< 31	< 3.2
UZ-10-110501-WS	< 13	< 12	< 21	< 3.2
UZ-11-110501-WS	< 13	< 12	< 21	< 3.2
UZ-12-110501-WS	< 13	< 12	< 21	< 3.2
UZ-13-190501-WS	< 26	84 ± 18	< 48	6 ± 4
UZ-13-190501-WS	< 27	76 ± 18	< 51	< 7.0
UZ-14-170501-WS	< 17	< 16	< 29	< 4.2
UZ-15-190501-WS	< 16	< 16	< 27	< 4.4

B.3.26 Uzbekistan Bottom Sediments Radionuclides Data, Spring 2001
 ^{40}K through ^{226}Ra

Sample Code	K-40 Bq/kg	Cs-137 Bq/kg	Tl-208 Bq/kg	Pb-210 Bq/kg	Pb-212 Bq/kg	Bi-212 Bq/kg	Pb-214 Bq/kg	Bi-214 Bq/kg	Ra-224 Bq/kg	Ra-226 Bq/kg
UZ-01-180501-B	564 ± 47	2.8 ± 1.2	47.6 ± 4.8	31 ± 11	48.6 ± 2.4	56 ± 16	37.9 ± 2.4	34.5 ± 3.2	49 ± 17	42 ± 17
UZ-02-180501-B	464 ± 42	< 1.4	25.0 ± 3.7	16 ± 10	27.7 ± 1.9	35 ± 13	23.1 ± 1.9	23.0 ± 2.6	24 ± 14	41 ± 15
UZ-03-180501-B	568 ± 15	2.8 ± 0.4	45.2 ± 1.5	37.8 ± 3.3	51.5 ± 0.8	52 ± 5	36.8 ± 0.7	34.4 ± 1.0	51 ± 5	47 ± 5
UZ-04-310501-B	560 ± 46	< 1.5	19.6 ± 3.5	22 ± 10	24.6 ± 1.8	< 19	21.8 ± 1.9	20.0 ± 2.6	29 ± 14	< 24
UZ-05-290501-B	520 ± 47	2.3 ± 1.1	21.8 ± 3.8	21 ± 10	25.3 ± 1.9	32 ± 14	23.7 ± 2.1	21.6 ± 2.8	26 ± 15	32 ± 17
UZ-06-050601-B	622 ± 48	< 1.6	29.9 ± 4.2	22 ± 11	34.0 ± 2.1	37 ± 14	28.2 ± 2.2	28.2 ± 2.9	33 ± 16	34 ± 16
UZ-07-310501-B	1449 ± 66	2.5 ± 1.3	102 ± 7	134 ± 18	114.8 ± 3.7	133 ± 22	122.5 ± 4.1	113 ± 5	122 ± 24	140 ± 27
UZ-08-310501-B	949 ± 59	3.2 ± 1.3	68 ± 6	81 ± 15	74.9 ± 3.2	108 ± 20	77.1 ± 3.4	72.7 ± 4.6	93 ± 22	98 ± 24
UZ-09-290501-B	90 ± 45	< 2.1	29 ± 5	87 ± 14	30.5 ± 2.4	< 27	17.8 ± 2.3	16.7 ± 3.1	46 ± 19	< 35
UZ-10-150501-B	671 ± 55	5.9 ± 1.5	46 ± 5	93 ± 15	55.6 ± 2.9	59 ± 18	33.8 ± 2.6	30.9 ± 3.4	49 ± 18	34 ± 20
UZ-11-110501-B	589 ± 54	2.2 ± 1.3	43 ± 5	62 ± 13	48.2 ± 2.7	71 ± 19	32.3 ± 2.6	26.8 ± 3.3	48 ± 18	40 ± 19
UZ-12-290501-B	857 ± 56	< 1.5	37.3 ± 4.7	30 ± 12	40.2 ± 2.4	43 ± 15	26.9 ± 2.3	22.5 ± 2.9	47 ± 17	35 ± 17
UZ-13-190501-B	614 ± 52	2.8 ± 1.2	42 ± 5	58 ± 13	48.4 ± 2.7	55 ± 17	47.2 ± 2.9	43.6 ± 3.9	67 ± 19	74 ± 21
UZ-14-170501-B	567 ± 50	2.5 ± 1.2	38.5 ± 4.9	38 ± 12	45.1 ± 2.5	49 ± 17	40.7 ± 2.6	38.5 ± 3.5	37 ± 17	52 ± 19
UZ-15-190501-B	638 ± 51	< 1.8	44.5 ± 4.9	49 ± 12	43.9 ± 2.4	49 ± 16	40.0 ± 2.6	38.5 ± 3.5	31 ± 17	59 ± 19

Uzbekistan Bottom Sediments Radionuclides Data, Spring 2001, continued

^{227}Th through ^{235}U

Sample Code	Th-227 Bq/kg	Ac-228 Bq/kg	Th-234 Bq/kg	U-235 Bq/kg
UZ-01-180501-B	< 5.7	43 ± 7	28 ± 8	1.9 ± 1.0
UZ-02-180501-B	< 5.1	29 ± 6	19 ± 7	< 1.5
UZ-03-180501-B	2.4 ± 1.1	53.6 ± 2.2	27.1 ± 2.5	3.2 ± 0.3
UZ-04-310501-B	< 5.0	24 ± 5	18 ± 7	3.0 ± 1.0
UZ-05-290501-B	< 5.4	26 ± 6	25 ± 8	3.1 ± 1.1
UZ-06-050601-B	< 5.5	33 ± 6	28 ± 8	2.0 ± 1.0
UZ-07-310501-B	8.6 ± 4.6	134 ± 11	106 ± 13	9.5 ± 1.7
UZ-08-310501-B	< 7.0	99 ± 10	74 ± 11	6.2 ± 1.5
UZ-09-290501-B	< 6.8	39 ± 8	59 ± 10	5.4 ± 1.4
UZ-10-150501-B	< 6.5	68 ± 9	31 ± 9	4.5 ± 1.3
UZ-11-110501-B	< 6.2	64 ± 9	24 ± 9	3.1 ± 1.2
UZ-12-290501-B	< 6.1	53 ± 7	15 ± 8	2.7 ± 1.1
UZ-13-190501-B	< 6.3	49 ± 8	31 ± 9	2.7 ± 1.3
UZ-14-170501-B	< 6.3	51 ± 8	32 ± 9	3.9 ± 1.2
UZ-15-190501-B	< 6.1	54 ± 8	34 ± 9	3.2 ± 1.2

B.3.27 Uzbekistan Soils Radionuclides Data, Spring 2001
 ^{40}K through ^{226}Ra

Sample Code	K-40, Bq/kg	Cs-137, Bq/kg	Tl-208, Bq/kg	Pb-210, Bq/kg	Pb-212, Bq/kg	Bi-212, Bq/kg	Pb-214, Bq/kg	Bi-214, Bq/kg	Ra-224, Bq/kg	Ra-226, Bq/kg
UZ-01-180501-S	779 ± 56	5.2 ± 1.1	54.4 ± 4.8	53 ± 14	57.8 ± 2.4	61 ± 14	38.1 ± 2.1	36.2 ± 3.0	59 ± 14	33 ± 14
UZ-02-180501-S	470 ± 48	< 1.1	33.6 ± 4.2	34 ± 15	39.3 ± 2.2	46 ± 13	25.9 ± 1.9	26.2 ± 2.7	49 ± 14	28 ± 14
UZ-03-180501-S	703 ± 26	3.4 ± 0.5	47.0 ± 2.3	53 ± 7	51.5 ± 1.2	59 ± 7	34.9 ± 1.0	35.2 ± 1.5	54 ± 7	39 ± 7
UZ-04-310501-S	598 ± 52	1.9 ± 0.8	34.4 ± 4.1	32 ± 14	40.9 ± 2.2	56 ± 14	30.7 ± 2.0	30.4 ± 2.9	39 ± 13	29 ± 14
UZ-06-050601-S	618 ± 36	< 0.8	27.8 ± 2.7	34 ± 10	31.7 ± 1.4	32 ± 8	28.1 ± 1.4	25.8 ± 1.9	33 ± 9	31 ± 10
UZ-07-310501-S	977 ± 62	5.1 ± 1.2	80 ± 6	122 ± 19	85.6 ± 3.0	86 ± 16	76.4 ± 3.0	74.7 ± 4.1	91 ± 18	105 ± 20
UZ-08-310501-S	1127 ± 32	3.0 ± 0.5	90.7 ± 3.1	132 ± 10	96.2 ± 1.6	107 ± 9	72.1 ± 1.5	69.1 ± 2.0	90 ± 9	83 ± 10
UZ-09-290501-S	811 ± 64	6.1 ± 1.3	56 ± 6	84 ± 18	62.7 ± 2.9	54 ± 15	40.0 ± 2.5	37.2 ± 3.4	76 ± 17	51 ± 18
UZ-10-150501-S	769 ± 64	4.9 ± 1.2	53 ± 5	107 ± 19	58.2 ± 2.8	47 ± 15	34.6 ± 2.4	35.6 ± 3.4	63 ± 16	38 ± 17
UZ-11-110501-S	770 ± 26	4.7 ± 0.5	57.5 ± 2.4	142 ± 9	61.8 ± 1.2	65 ± 7	35.5 ± 1.0	34.6 ± 1.4	61 ± 7	46 ± 7
UZ-12-290501-S	903 ± 64	< 1.5	45.8 ± 5.0	45 ± 17	54.3 ± 2.6	67 ± 16	29.9 ± 2.2	27.9 ± 3.0	50 ± 15	29 ± 15
UZ-13-190501-S	532 ± 48	< 1.2	45.7 ± 4.5	51 ± 16	50.6 ± 2.3	72 ± 14	46.6 ± 2.3	45.3 ± 3.2	44 ± 14	39 ± 15
UZ-14-170501-S	682 ± 58	< 1.5	49 ± 5	52 ± 16	55.3 ± 2.6	79 ± 16	44.5 ± 2.5	45.5 ± 3.6	45 ± 15	65 ± 17
UZ-15-190501-S	663 ± 28	< 0.7	36.8 ± 2.2	57 ± 8	40.4 ± 1.1	44 ± 7	36.7 ± 1.1	34.2 ± 1.6	38 ± 7	36 ± 8

Uzbekistan Soils Radionuclides Data, Spring 2001, continued

^{227}Th through ^{235}U

Sample Code	Th-227 Bq/kg	Ac-228 Bq/kg	Th-234 Bq/kg	U-235 Bq/kg
UZ-01-180501-S	5.1 ± 3.0	58.9 ± 4.0	28 ± 10	4.0 ± 1.0
UZ-02-180501-S	5.0 ± 2.9	37.4 ± 3.5	22 ± 8	1.9 ± 0.9
UZ-03-180501-S	4.6 ± 1.5	51.5 ± 1.9	28.0 ± 4.1	2.9 ± 0.5
UZ-04-310501-S	< 4.6	37.3 ± 3.6	33 ± 9	3.4 ± 0.9
UZ-06-050601-S	< 3.1	33.5 ± 2.3	25 ± 6	2.7 ± 0.6
UZ-07-310501-S	10.0 ± 3.5	84.4 ± 4.9	84 ± 11	6.4 ± 1.2
UZ-08-310501-S	7.3 ± 1.8	99.8 ± 2.6	68 ± 6	5.3 ± 0.6
UZ-09-290501-S	5.8 ± 3.5	58.8 ± 4.6	43 ± 10	3.2 ± 1.1
UZ-10-150501-S	6.3 ± 3.5	58.2 ± 4.7	41 ± 10	3.5 ± 1.1
UZ-11-110501-S	4.0 ± 1.4	63.0 ± 2.0	32.2 ± 4.1	3.5 ± 0.5
UZ-12-290501-S	< 5.2	58.8 ± 4.5	27 ± 9	3.5 ± 1.0
UZ-13-190501-S	< 4.6	49.4 ± 3.8	38 ± 9	3.3 ± 1.0
UZ-14-170501-S	< 5.5	56.8 ± 4.4	35 ± 10	3.3 ± 1.1
UZ-15-190501-S	< 2.4	42.1 ± 1.9	38.9 ± 4.6	4.1 ± 0.5

B.3.28 Uzbekistan Vegetation Radionuclides Data, Fall 2000
 ^{40}K through ^{226}Ra

Sample code	K-40 Bq/kg	Cs-137 Bq/kg	Pb-210 Bq/kg	Pb-212 Bq/kg	Bi-212 Bq/kg	Pb-214 Bq/kg	Bi-214 Bq/kg	Tl-208 Bq/kg	Ra-224 Bq/kg	Ra-226 Bq/kg
UZ-01-091100-V	329 ± 15	< 0.4	24 ± 4	14.3 ± 0.6	18.9 ± 4.3	10.7 ± 0.7	12.2 ± 1.1	13.6 ± 1.6	12.6 ± 4.0	14.7 ± 4.4
UZ-02-091100-V	228 ± 14	< 0.4	18 ± 4	4.7 ± 0.4	6.7 ± 3.5	5.7 ± 0.6	6.1 ± 0.9	3.9 ± 1.2	< 5.4	6.7 ± 3.6
UZ-03-091100-V	232 ± 11	< 0.3	14 ± 3	6.5 ± 0.4	9.7 ± 3.0	4.8 ± 0.4	5.3 ± 0.7	5.7 ± 1.0	5.1 ± 2.7	7.2 ± 3.0
UZ-04-021100-V	366 ± 23	0.9 ± 0.5	23 ± 5	15.9 ± 0.9	23 ± 7	11.9 ± 0.9	11.6 ± 1.3	14.1 ± 2.0	15.3 ± 6.2	< 12
UZ-05-171100-V	574 ± 11	0.4 ± 0.2	47 ± 3	22.1 ± 0.4	30 ± 3	18.1 ± 0.4	18.6 ± 0.7	18.8 ± 1.0	19.2 ± 3.0	23 ± 4
UZ-06-241000-V	1183 ± 56	< 1.5	21 ± 8	22.4 ± 1.7	43 ± 14	19.3 ± 1.7	21.3 ± 2.7	18.5 ± 3.7	24 ± 12	< 22
UZ-07-191000-V	1149 ± 40	6.0 ± 1.0	173 ± 17	124 ± 3	152 ± 16	159 ± 4	162 ± 6	120 ± 7	119 ± 17	222 ± 21
UZ-08-191000-V	458 ± 27	4.1 ± 0.8	96 ± 10	53 ± 2	50 ± 10	53 ± 2	54 ± 3	55 ± 4	39 ± 10	69 ± 11
UZ-09-171000-V	715 ± 41	< 1.8	70 ± 11	154 ± 3	207 ± 22	177 ± 4	180 ± 7	147 ± 9	153 ± 20	216 ± 21
UZ-10-111000-V	458 ± 32	5.3 ± 1.0	110 ± 10	72 ± 2	92 ± 14	57 ± 2	57 ± 3	69 ± 5	70 ± 13	84 ± 15
UZ-11-101000-V	421 ± 26	< 0.9	16 ± 6	20.9 ± 1.1	21 ± 8	16.6 ± 1.3	16.4 ± 1.9	17.9 ± 2.9	22 ± 8	32 ± 9
UZ-12-101000-V	2220 ± 103	< 2.8	34 ± 16	49 ± 3	53 ± 24	26 ± 3	24 ± 5	46 ± 9	50 ± 23	< 38

Uzbekistan Vegetation Radionuclides Data, Fall 2000, continued

^{227}Th through ^{235}U

Sample code	Th-227 Bq/kg	Ac-228 Bq/kg	Th-234 Bq/kg	U-235 Bq/kg
UZ-01-091100-V	1.6 ± 0.9	15.6 ± 1.2	6.6 ± 2.6	0.8 ± 0.3
UZ-02-091100-V	< 1.2	6.0 ± 0.9	< 3.6	< 0.4
UZ-03-091100-V	< 1.0	6.4 ± 0.8	7.3 ± 2.0	0.6 ± 0.2
UZ-04-021100-V	< 2.3	16.0 ± 1.7	16.6 ± 3.5	1.9 ± 0.5
UZ-05-171100-V	< 1.1	44 ± 1	63 ± 2	5.1 ± 0.2
UZ-06-241000-V	< 4.3	31 ± 4	39 ± 7	3.9 ± 0.9
UZ-07-191000-V	7.8 ± 3.1	141 ± 5	190 ± 14	9.4 ± 1.2
UZ-08-191000-V	< 3.1	69 ± 3	47 ± 7	3.3 ± 0.7
UZ-09-171000-V	< 5.3	345 ± 9	45 ± 10	2.9 ± 1.1
UZ-10-111000-V	< 4.0	102 ± 4	57 ± 7	3.8 ± 0.9
UZ-11-101000-V	< 2.9	32 ± 3	19.8 ± 5.0	1.7 ± 0.5
UZ-12-101000-V	< 8.6	71 ± 7	< 21	3.3 ± 1.5

B.3.29 Uzbekistan Vegetation Radionuclides Data, Spring 2001
 ^{40}K through ^{226}Ra

Sample code	K-40 Bq/kg	Cs-137 Bq/kg	Tl-208 Bq/kg	Pb-210 Bq/kg	Pb-212 Bq/kg	Bi-212 Bq/kg	Pb-214 Bq/kg	Bi-214 Bq/kg	Ra-224 Bq/kg	Ra-226 Bq/kg
UZ-01-180501-V	754 ± 25	0.5 ± 0.3	7.5 ± 1.3	12 ± 3	1.4 ± 0.5	16 ± 5	7.0 ± 0.6	5.9 ± 0.9	11 ± 3	14 ± 4
UZ-02-180501-V	573 ± 16	0.8 ± 0.2	8.4 ± 0.9	20 ± 2	9.3 ± 0.4	12 ± 3	7.6 ± 0.4	7.4 ± 0.6	7.0 ± 2.3	16 ± 3
UZ-03-180501-V	571 ± 24	0.8 ± 0.3	8.9 ± 1.5	20 ± 3	10.3±0.5	12 ± 5	7.7 ± 0.6	7.7 ± 1.0	10 ± 4	16 ± 4
UZ-04-310501-V	495 ± 25	0.7 ± 0.4	21 ± 2.2	21 ± 5	24 ± 1	30 ± 7	21 ± 1	21 ± 2	17 ± 5	63 ± 7
UZ-05-290501-V	380 ± 20	0.7 ± 0.3	4.0 ± 1.2	14 ± 3	6.0 ± 0.4	9.6±4.1	4.9 ± 0.5	4.7 ± 0.8	6.4 ± 3.2	28 ± 5
UZ-06-050601-V	670 ± 28	< 0.6	14 ± 2	17 ± 4	19 ± 1	27 ± 7	13 ± 1	13 ± 1	14 ± 5	48 ± 6
UZ-07-310501-V	1117 ± 39	3.6 ± 0.6	19 ± 2	32 ± 5	22 ± 1	28 ± 8	28 ± 1	29 ± 2	18 ± 6	51 ± 7
UZ-08-310501-V	1018 ± 16	0.6 ± 0.2	7.3 ± 0.8	13 ± 2	9.8 ± 0.3	13 ± 3	10.3±0.4	10.3±0.6	7.3 ± 2.1	19 ± 2
UZ-09-290501-V	288 ± 34	1.3 ± 0.6	28 ± 4	70 ± 9	31 ± 2	47 ± 13	19 ± 2	19 ± 2	31 ± 9	41 ± 10
UZ-10-150501-V	644 ± 26	1.6 ± 0.4	16 ± 2	31 ± 4	20 ± 1	28 ± 7	15 ± 1	15 ± 1	18 ± 5	26 ± 5
UZ-11-110501-V	623 ± 36	1.1 ± 0.5	29 ± 3	25 ± 6	30 ± 1	30 ± 9	21 ± 1	22 ± 2	29 ± 7	36 ± 8
UZ-12-290501-V	560 ± 29	< 0.8	32 ± 3	18 ± 4	35 ± 1	48 ± 9	21 ± 1	21 ± 2	28 ± 6	57 ± 8
UZ-13-190501-V	419 ± 14	< 0.3	5.1 ± 0.8	15 ± 2	5.7 ± 0.3	8.5±2.7	6.9 ± 0.4	7.0 ± 0.6	5.2 ± 2.0	12 ± 2
UZ-14-170501-V	832 ± 35	< 0.7	10.3±2.0	15 ± 4	14 ± 1	17 ± 7	12 ± 1	12 ± 2	15 ± 5	24 ± 6
UZ-15-190501-V	772 ± 12	< 0.2	< 0.8	< 1.7	1.9 ± 0.2	4.1±2.1	1.2 ± 0.2	1.2 ± 0.4	< 2.3	4.8±1.6

Uzbekistan Vegetation Radionuclides Data, Spring 2001, continued
 ^{227}Th through ^{235}U

Sample code	Th-227 Bq/kg	Ac-228 Bq/kg	Th-234 Bq/kg	U-235 Bq/kg
UZ-01-180501-V	< 1.5	10.5 ± 1.1	5.0 ± 1.9	0.6 ± 0.3
UZ-02-180501-V	< 0.9	10.5 ± 0.8	5.3 ± 1.3	0.3 ± 0.2
UZ-03-180501-V	< 1.5	11.0 ± 1.1	13 ± 2	0.8 ± 0.3
UZ-04-310501-V	< 2.0	32 ± 2	64 ± 4	2.9 ± 0.4
UZ-05-290501-V	< 1.4	10.5 ± 1.1	25 ± 2	1.6 ± 0.3
UZ-06-050601-V	< 1.9	31 ± 2	49 ± 4	2.9 ± 0.4
UZ-07-310501-V	< 2.4	25 ± 2	16 ± 3	0.7 ± 0.4
UZ-08-310501-V	< 0.9	12 ± 1	3.4 ± 1.1	0.5 ± 0.1
UZ-09-290501-V	< 3.4	44 ± 3	39 ± 6	2.2 ± 0.6
UZ-10-150501-V	< 1.8	21 ± 2	9.0 ± 2.4	0.9 ± 0.3
UZ-11-110501-V	< 2.7	39 ± 3	19 ± 4	1.8 ± 0.5
UZ-12-290501-V	< 2.4	72 ± 3	38 ± 4	2.2 ± 0.4
UZ-13-190501-V	< 0.8	6.9 ± 0.7	4.4 ± 1.2	0.3 ± 0.1
UZ-14-170501-V	< 2.1	14 ± 2	10 ± 3	0.7 ± 0.3
UZ-15-190501-V	< 0.7	1.8 ± 0.4	< 1.3	0.4 ± 0.1

B.3.30 Uzbekistan Bottom Sediments Metals Data, Spring 2001
Ca through Rb

Sample Code	Ca, %	Ti, %	Mn, %	Fe, %	Cu g/t	Zn, g/t	As, g/t	Rb, g/t
UZ-01-180501-B	7.8 ± 0.2	0.34 ± 0.05	0.04 ± 0.01	3.31 ± 0.02	< 28	66 ± 15	< 37	78 ± 3
UZ-02-180501-B	7.5 ± 0.2	0.29 ± 0.05	0.03 ± 0.01	2.26 ± 0.02	< 25	34 ± 13	< 34	63 ± 3
UZ-03-180501-B	8.1 ± 0.1	0.36 ± 0.02	0.05 ± 0.01	3.39 ± 0.01	< 13	58 ± 7	17 ± 11	78 ± 1
UZ-04-310501-B	8.8 ± 0.2	0.25 ± 0.05	0.03 ± 0.01	2.17 ± 0.02	< 27	37 ± 14	< 37	71 ± 3
UZ-05-290501-B	11.9 ± 0.2	0.18 ± 0.05	0.04 ± 0.01	2.25 ± 0.02	< 27	78 ± 15	< 37	62 ± 3
UZ-06-050601-B	7.7 ± 0.2	0.27 ± 0.05	0.04 ± 0.01	2.16 ± 0.02	< 29	41 ± 15	< 40	80 ± 3
UZ-07-310501-B	0.8 ± 0.1	0.32 ± 0.02	0.07 ± 0.00	2.23 ± 0.01	< 11	66 ± 6	< 15	204 ± 2
UZ-08-310501-B	5.4 ± 0.2	0.35 ± 0.05	0.05 ± 0.01	2.69 ± 0.02	< 26	99 ± 14	< 36	127 ± 3
UZ-09-290501-B	15.1 ± 0.1	< 0.10	0.04 ± 0.01	0.73 ± 0.02	< 30	59 ± 16	< 43	22 ± 3
UZ-10-150501-B	6.6 ± 0.2	0.31 ± 0.04	0.05 ± 0.01	2.82 ± 0.02	< 24	157 ± 14	< 34	91 ± 3
UZ-11-110501-B	7.9 ± 0.1	0.34 ± 0.02	0.03 ± 0.00	2.81 ± 0.01	19 ± 8	77 ± 6	< 16	89 ± 1
UZ-12-290501-B	8.9 ± 0.2	0.19 ± 0.05	0.02 ± 0.01	1.75 ± 0.02	< 25	31 ± 13	< 34	105 ± 3
UZ-13-190501-B	4.9 ± 0.2	0.39 ± 0.04	0.03 ± 0.01	2.75 ± 0.02	< 25	66 ± 13	< 35	88 ± 3
UZ-14-170501-B	6.1 ± 0.2	0.37 ± 0.04	0.03 ± 0.01	2.42 ± 0.02	< 23	53 ± 12	< 31	77 ± 3
UZ-15-190501-B	7.3 ± 0.1	0.32 ± 0.02	0.03 ± 0.00	3.11 ± 0.01	< 13	72 ± 7	24 ± 11	88 ± 1

Uzbekistan Bottom Sediments Metals Data, Spring 2001, continued

Sr through Pb

Sample Code	Sr, g/t	Y, g/t	Zr, g/t	Nb, g/t	Mo, g/t	Ba, g/t	Pb, g/t
UZ-01-180501-B	259 ± 4	22 ± 3	192 ± 3	10.9 ± 1.5	2.0 ± 1.1	395 ± 26	28 ± 9
UZ-02-180501-B	238 ± 4	13 ± 2	112 ± 3	7.5 ± 1.3	< 1.4	414 ± 24	< 12
UZ-03-180501-B	274 ± 2	22 ± 1	196 ± 2	12.0 ± 0.7	1.6 ± 0.5	384 ± 12	9 ± 4
UZ-04-310501-B	205 ± 4	11 ± 3	152 ± 3	8.5 ± 1.4	1.8 ± 1.0	769 ± 33	< 13
UZ-05-290501-B	345 ± 5	12 ± 3	107 ± 3	7.4 ± 1.4	1.8 ± 1.0	592 ± 30	29 ± 9
UZ-06-050601-B	216 ± 4	14 ± 3	140 ± 3	9.0 ± 1.6	< 1.7	646 ± 34	< 15
UZ-07-310501-B	97 ± 1	26 ± 1	242 ± 1	28.8 ± 0.8	2.6 ± 0.5	660 ± 13	39 ± 4
UZ-08-310501-B	232 ± 4	23 ± 3	242 ± 4	17.2 ± 1.6	2.9 ± 1.1	861 ± 34	63 ± 10
UZ-09-290501-B	596 ± 6	< 4	19 ± 3	< 2.2	< 1.6	258 ± 25	37 ± 11
UZ-10-150501-B	239 ± 4	16 ± 2	174 ± 3	11.0 ± 1.4	1.4 ± 0.9	591 ± 27	54 ± 9
UZ-11-110501-B	206 ± 2	19 ± 1	180 ± 1	13.1 ± 0.7	1.7 ± 0.5	532 ± 13	34 ± 4
UZ-12-290501-B	276 ± 4	9 ± 2	87 ± 2	9.5 ± 1.3	< 1.3	893 ± 32	22 ± 8
UZ-13-190501-B	151 ± 3	21 ± 3	219 ± 3	13.5 ± 1.5	1.6 ± 1.0	927 ± 34	< 13
UZ-14-170501-B	178 ± 3	20 ± 2	240 ± 3	12.5 ± 1.3	1.6 ± 0.9	819 ± 29	12 ± 8
UZ-15-190501-B	252 ± 2	19 ± 1	161 ± 1	12.2 ± 0.7	2.1 ± 0.5	747 ± 15	11 ± 4

B.3.31 Uzbekistan Soils Metals Data, Spring 2001
Ca through Rb

Sample Code	Ca, %	Ti, %	Mn, %	Fe, %	Cu, g/t	Zn, g/t	As, g/t	Rb, g/t
UZ-01-180501-S	7.6 ± 0.2	0.32 ± 0.04	0.06 ± 0.01	4.07 ± 0.02	< 28	89 ± 15	< 37	98 ± 3
UZ-02-180501-S	7.8 ± 0.1	0.35 ± 0.02	0.03 ± 0.00	2.39 ± 0.01	< 12	33 ± 6	< 16	60 ± 1
UZ-03-180501-S	7.4 ± 0.2	0.34 ± 0.05	0.04 ± 0.01	3.62 ± 0.02	< 30	74 ± 16	< 39	86 ± 3
UZ-04-310501-S	8.3 ± 0.2	0.32 ± 0.05	0.04 ± 0.01	2.40 ± 0.02	< 28	49 ± 14	< 37	74 ± 3
UZ-05-290501-S	8.3 ± 0.2	0.22 ± 0.05	0.05 ± 0.01	1.96 ± 0.02	< 25	57 ± 13	< 34	70 ± 3
UZ-06-050601-S	8.0 ± 0.2	0.25 ± 0.05	0.03 ± 0.01	2.06 ± 0.02	< 26	34 ± 14	< 36	75 ± 3
UZ-07-310501-S	3.4 ± 0.2	0.35 ± 0.04	0.06 ± 0.01	3.15 ± 0.02	< 27	121 ± 15	< 37	128 ± 4
UZ-08-310501-S	2.4 ± 0.2	0.32 ± 0.05	0.04 ± 0.01	2.62 ± 0.02	41 ± 22	246 ± 20	< 45	153 ± 4
UZ-09-290501-S	8.0 ± 0.1	0.25 ± 0.02	0.04 ± 0.01	2.57 ± 0.01	< 13	133 ± 7	< 17	102 ± 2
UZ-10-150501-S	7.5 ± 0.2	0.30 ± 0.05	0.04 ± 0.01	2.64 ± 0.02	< 27	133 ± 15	< 37	82 ± 3
UZ-11-110501-S	7.0 ± 0.2	0.33 ± 0.04	0.05 ± 0.01	2.77 ± 0.02	< 26	177 ± 15	< 35	90 ± 3
UZ-12-290501-S	7.0 ± 0.2	0.29 ± 0.05	0.04 ± 0.01	2.13 ± 0.02	< 27	50 ± 14	< 37	105 ± 3
UZ-13-190501-S	5.3 ± 0.1	0.38 ± 0.02	0.03 ± 0.00	2.44 ± 0.01	< 10	51 ± 5	18 ± 9	73 ± 1
UZ-14-170501-S	5.2 ± 0.2	0.38 ± 0.05	0.03 ± 0.01	2.84 ± 0.02	< 27	71 ± 15	< 38	89 ± 3
UZ-15-190501-S	7.3 ± 0.1	0.28 ± 0.02	0.03 ± 0.01	2.57 ± 0.01	13 ± 8	135 ± 7	< 17	75 ± 1

Uzbekistan Soils Metals Data, Spring 2001, continued
Sr through Pb

Sr, g/t	Y, g/t	Zr, g/t	Nb, g/t	Mo, g/t	Ba, g/t	Pb, g/t
253±4	21±3	147±3	12.1±1.5	1.7±1.0	417±26	32±9
250±2	17±1	191±1	8.1±0.6	1.5±0.5	388±11	7±4
252±4	22±3	145±3	11.6±1.6	<1.6	420±28	<15
233±4	16±3	220±4	10.0±1.5	2.1±1.1	856±35	14±9
203±3	10±2	71±2	7.6±1.3	<1.3	560±27	40±9
203±4	12±3	162±3	9.4±1.4	1.7±1.0	653±30	14±9
195±4	29±3	207±3	17.4±1.6	4.1±1.1	581±30	38±9
252±5	20±4	251±4	18.3±2.0	5.7±1.4	1199±47	116±13
253±2	21±1	158±1	13.1±0.7	1.9±0.5	594±14	67±5
218±4	17±3	166±3	11.7±1.5	1.8±1.0	580±30	67±10
198±3	19±3	178±3	12.1±1.4	1.8±1.0	621±29	65±9
241±4	13±3	149±3	12.2±1.5	<1.5	842±34	30±9
133±1	18±1	227±1	11.9±0.6	1.8±0.4	995±14	28±3
178±4	22±3	215±3	15.1±1.6	1.7±1.1	881±36	58±10
389±2	16±1	145±1	10.6±0.7	2.2±0.5	629±14	98±5

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